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# Christianity Science *and* Infidelity

HILLIER

# CHRISTIANITY, SCIENCE, AND INFIDELITY:

A Series of Letters Vindicating the received Truths of our Common Faith,

SHOWING

THE FOLLIES AND ABSURDITIES OF ATHEISM.

OCCASIONED BY THE RETURN OF

MR. CHARLES BRADLAUGH

AS MEMBER OF PARLIAMENT FOR NORTHAMPTON.

BY

DR. HILLIER,

WINGRAVE MANSE, AYLESBURY, BUCKS.

WITH

*A PREFATORY RECOMMENDATION BY THE REV. HENRY VARLEY.*

BIBLIOTHECA
AUG 1882
BODLEIANA

LONDON:
R. D. DICKINSON, 89, FARRINGDON STREET.
1881.

1411 92 . 123

FOLKARD AND SON, PRINTERS,
DEVONSHIRE STREET, QUEEN SQUARE,
LONDON, W.C.

TO

GEORGE W. E. RUSSELL, ESQ., M.A.,

M.P. FOR AYLESBURY,

AS AN HUMBLE TOKEN OF ESTEEM

AND ADMIRATION FOR HIS

BRILLIANT TALENTS, AND HIS NOBLE FAMILY'S

PHILANTHROPY,

This Volume is most respectfully dedicated

BY THE AUTHOR.

## PREFATORY RECOMMENDATION.

IT is with great pleasure that I express my deep sense of the value of your "Series of Letters."

In a clear and popular form they successfully show "the follies and absurdities of atheism," and give testimony that cannot fail to be helpful to those who are defending "revealed truth" from the lawless reasonings of men who, "not liking to retain God in their knowledge, are given over to a reprobate mind" (a mind void of judgment, *margin*)—Rom. i. 28.

There is so much cogency in the "argument of design," that I am glad you have given such intelligent and graphic prominence to the subject. Of course it will be said, "this testimony is old." *Surely, and the older the more forcible.* I have a great respect for standard institutions such as Sunlight, a Yard Measure,

a Straight Line, the Right, the Truth, the Bible, &c. These great factors have successfully controverted Atheism in the past, and not only are they as fresh as in the hour when God said "Let there be light," but they are as powerful as ever to overthrow iniquity and infidelity.

It is high time that the poisonous principles of the Bradlaugh school were exposed, labelled, and exploded, and you have done good service by your timely efforts towards this desirable result. Resolute and unflinching opposition to Mr. Bradlaugh's coarse and blasphemous utterances is an immediate necessity; and the censorship now existing in regard to his speeches and writings is doing much to show his admirers and followers that he dare not, with the eyes of the nation looking on, utter the brazen calumnies against Christianity that have made him so notorious in the past.

Mr. Bradlaugh dare no longer, by gross misrepresentation, deceive his hearers and readers concerning the character and teachings of Christ Jesus Our Lord. No longer dare he, by subtle reasonings, charge upon

Christianity the iniquity committed by some of those who, professing to be its friends, were enemies of truth and righteousness. This, Mr. Bradlaugh has done in the past, and has thus been guilty of the worst form of slander. He has caricatured the truth of Christ, and then held it up to the contemptuous scorn of crowded audiences, who were blinded by his lawless sophistry. Thousands of self-denying men, who have spent their lives in promoting the common weal of their fellows, both for time and eternity, have been held up by him to ridicule because they had not the audacity to affirm that man is a mere animal whose end is "to die as a dog."

Making capital out of the ignorance and prejudice of his hearers, and affecting a knowledge of the Bible that he does not possess, Mr. Bradlaugh has caused an amount of social mischief and unbelief that is simply deplorable, and no time must be lost in opposing with energy the infidel leaven that threatens to corrupt the masses of our country.

I, for one, promise Mr. Bradlaugh stern rebuke, exposure, and unsparing criticism, until he ceases to

shock the moral sense of his fellow men by his abominable teachings and utterances.

As an illustration of the sophistry of these teachers, I may add that Mrs. Besant, when at Manchester a few weeks since, quoted to a lady the passage in Ecclesiastes, chap. iii., 19: "For that which befalleth the sons of men befalleth beasts—as the one dieth, so dieth the other; yea, they have all one breath, so that a man hath no pre-eminence above a beast; for all is vanity; all go unto one place, and all turn to dust again." This was given by Mrs. Besant as a triumphant vindication from the Bible itself of her atheistic principles. I happened to be appealed to concerning this incident, and the difficulty caused in the mind of the lady. Of course, I simply said: read on! The next sentence is, "who knoweth *the spirit* of man that goeth upward (is ascending), and the spirit of the beast that goeth downward to the earth."

Mrs. Besant could not but know the context, and be aware that in the *part* of the passage she quoted, the allusion was to the body, which, in common with all animal substances, returns to dust, whilst that part

of the passage which she so adroitly hid, completely cut the ground from under her own feet. What a contemptible spirit of deception this reveals! Well is it written—

> "Hear the just law, the judgment of the skies:
> He that hates truth shall be the dupe of lies,
> And he that will be cheated, at the last
> Delusion strong as death shall bind him fast."

That your efforts to spread the knowledge of truth may be crowned with abundant success is the hearty desire of your sincere friend,

HENRY VARLEY.

*Notting Hill, London, W.,*
*August 8th,* 1881.

# PREFACE.

COURTEOUS READER.—These Letters were occasioned by the election of Mr. Charles Bradlaugh, M.P.; and their author, in publishing them, desired that they might exercise a counteracting influence to the evils resulting from the discussions in the House of Commons and in the Country, over the election of an avowed atheist.

In the writing of these Letters, the following celebrated authors have been laid under contribution:—Archbishop Thomson, the Duke of Argyll, Bishop Butler, Lord Brougham, Baron Humboldt, Rt. Hon. W. E. Gladstone, Sir William Hamilton, Sir John Herschell, Sir Isaac Newton, Dr. Brewer, Dr. Campbell, Dr. Carpenter, Dr. Carlisle, Dr. Chalmers, Dr. S. Clarke, Dr. Cooke, Dr. Cornwell, Dr. Cowdy, Dr. Cumming, Dr. Dick, Dr. Doddridge, Dr. Dwight,

Dr. Graham, Dr. Hengstenberg, Dr. Hodge, Dr. Huxley, Dr. Latham, Dr. Paley, Dr. Parker, Dr. Priestley, Dr. Reid, Dr. Van Oosterzee, Dr. Watson, Dr. Wayland, Dr. Whewell, Matthew Arnold, Thomas Carlyle, John Foster, Brewin Grant, Robert Hall, F. Harrison, Paxton Hood, John Locke, John S. Mill, Arthur Rees, George St. Clare, Herbert Spencer, and William Wilberforce; but the writers to whom I am more especially indebted are—the Rev. C. H. Spurgeon, the Rev. Joseph Cook, of Boston, U.S.A., the venerable Thomas Cooper, and the late Joseph Barker.

In order to disarm prejudice, and secure a wide constituency of readers, the writer employed the *nom de plume*, "Christianus Sum," when the Letters first appeared in the *Bucks Advertiser;* but he now issues them in his own name, and earnestly prays that they may do good.

They are not intended for the critical, but for the popular reader.

The writer had cherished the hope of revising these Letters before issuing them in book form; but the result of the second election for Northampton appeared to him to call for their immediate publication, to counteract in some measure the evils which will follow Mr. Bradlaugh's second attempt to enter the House of Commons.

Yours, to serve in the Gospel,

W. HILLIER.

*Wingrave Manse,*
*Aylesbury, Bucks.*
1881.

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# INTRODUCTION.

IT is a well known fact that Henry VIII., King of England, received the title "Defender of the Faith" from Pope Leo X. as a reward for writing a book against Martin Luther. If the defence of the Christian faith had been left to such men as Henry VIII., Charles II., and George IV., the House of Commons would have contained to-day more than one avowed atheist. But subjects are generally speaking better defenders of the faith than sovereigns, and therefore such men as Dr. S. Clarke, Bishop Butler, Archdeacon Paley, Dr. Lardner, Dr. Gregory, Thomas Cooper, and the Rev. C. H. Spurgeon are the best defenders of England's greatness. This thought was clearly contained in the statement made by our Queen, when she said to the foreign prince, "The Bible is the secret of England's greatness." If we take the words of the noble Queen as conveying the truth in this matter, then it is literally true to say that the defenders of the faith, and teachers of Christianity, and preachers of the Gospel are the best defenders of our shores and promoters of our national greatness. The greatest living defender of

Christianity is the Rev. Joseph Cook, of Boston, U.S.A., who has made its defence his speciality, and is now in this country giving a course of lectures on the subject. Paul could say, "I am set for the defence of the Gospel," and preachers are only doing their duty and promoting their Master's kingdom when they defend Christianity. Ministers must not be content with having satisfied themselves as to the moral, historical, and philosophical evidences of Christianity; they must place the arguments which they have found conclusive for themselves before the people in the Churches and Chapels. The people of to-day are becoming sceptical by reading some of the objections to Christianity in the magazines and papers which are published weekly and monthly; and to whom should they look for a confutation of infidel logic and a faithful defence of the Gospel but to their respective Ministers? I know that one man cannot be a chemist, a geologist, a botanist, a philosopher, a pastor, a preacher and lecturer on Christianity and science as well, but he should know enough of "Apologetics" to defend the Gospel. The pulpit will lose its hold on the intelligent and educated people in our Churches and Chapels if the ministers of the Gospel do not bring more common sense as well as doctrines into their sermons. The subject of this letter is the "*Argumentum à priori*," as set forth in the Boyle lectures by Dr. Samuel Clarke, delivered in London, A.D. 1704. I may take it for granted that

not more than one in every hundred of the readers of the *Bucks Advertiser* ever heard of the Boyle lectures, and, therefore, I hope to do them some service by giving the twelve reasons of the argument of Dr. Clarke in a modern and abridged form. I am anxious to take this course to show that the intelligent Christian has at least a dozen of sound reasons and profound arguments for his faith in God. I place these reasons in contrast to Atheism, which has not one single reason or positive argument in its favour. Mr. Bradlaugh, in his "Liverpool discussion" with Dr. Joseph Baylee, says, "I call myself an Atheist." But instead of giving reasons for his Atheism, he spent the whole time in trying to pull down Christianity, thus answering to his assumed title, "Iconoclast." Now for the twelve reasons.

1. First, then, it is absolutely and undeniably certain that something has existed from all eternity. This first proposition is so evident, that no person in a sound mind can deny it. For since something now is, it is certain that something always was; otherwise the things that now are must have risen out of nothing, absolutely and without cause, which is a plain contradiction in terms.

2. "That there has existed from eternity some One Unchangeable and Independent Being." This unchangeable and independent Being is the Christian's God, the first great cause, and Maker of heaven and

earth. Matter is not self-existent nor self-created. This would imply the absurdity of having the power to create before it had existence. Let us suppose a case. One thousand blind men shall set out from a thousand different parts of England, without any guides, and shall be requested to meet in Aylesbury Vale, and fall into rank and file like a well-drilled regiment. And, yet, the above is much more easy to be imagined than that the blind parts of matter should form themselves into the world. So that reason must acknowledge an Almighty Creator, a truth which is fully confirmed by the first verse in the Bible.

3. "That this unchangeable and independent Being, which has existed from eternity, without any external cause of its existence, must be self-existent; that is, necessarily existent." The above proposition implies that God is a Spirit, in and of Himself infinite in Being, glory, blessedness, and perfection; all-sufficient, eternal, unchangeable, incomprehensible, everywhere present, Almighty, knowing all things, most wise, most holy, most just, and abundant in goodness and truth. Such a great and glorious Being is worthy of the homage of the mind, the love of the heart, and the service of the life.

4. "What the substance or essence of that Being, who is self-existent, is, we have no idea, neither is it at all possible for us to comprehend it." No man living, however learned in science or philosophy,

knows anything of the substance or essence of matter or mind, and, therefore, the above proposition is not to be wondered at. As God is infinite and man's mind finite, it is impossible for man fully to comprehend the Deity, yet it is possible for man to apprehend Him as He is manifested in Creation, Providence, and Scripture.

5. "Though the substance or essence of the self-existent Being is itself absolutely incomprehensible to us, yet many of the essential attributes of His nature are strictly demonstrable, as well as His existence." The naturable attributes of God, such as His eternity, immensity, immutability, and omnipotence, are clearly seen in nature. His moral perfections, such as wisdom, truth, goodness, love, and mercy, are fully revealed in the Bible. Those infidels, sceptics, and atheists who will not see God in nature, providence, and Scripture, are wilfully ignorant, and without excuse. See Romans i., v. 20.

6. "The self-existent Being must of necessity be infinite and omnipresent." "The idea of immensity, as well as of eternity, is so closely connected with that of self-existence, that a self-existent Being must of necessity be both infinite and omnipresent. This is the Christian's idea of his God, Who is a personal, conscious intelligence, existing everywhere and in every part of everywhere. He is the only God, Who is from everlasting to everlasting, filling the regions of

immensity with His presence. What a sublime subject is this proposition for man's contemplation!

7. "The self-existent Being must of necessity be but one." The unity of God is a true and real unity, the foundation of natural religion, and in perfect harmony with the Scriptural doctrine of the adorable Trinity. If this God be infinite and omnipresent, filling immensity, there is only room for one such Deity in the Mighty Universe.

8. "That the self-existent and Original Cause of all things must be an Intelligent Being." Here begins the argument from antecedent probabilities, commonly called the *argumentum à priori*. The full development of this train of reasoning, however, would consume too much of the space given to the Theological Letter. I must confine myself to a sentence or two, simply to indicate the outline of thought. I know that I exist, and that I am a personal, conscious, and intelligent being. I know that I have not always existed, as my consciousness only goes back a few years. Yet, someone has existed before me, for the self-evident reason that non-intelligence cannot produce intelligence. Therefore, the self-existent and first Cause of all things is the all-wise and intelligent God Who created man with reason. The intelligence of the Creator appears abundantly from the excellent variety, order, beauty, and wonderful design and contrivance in the world. This fact will be seen more fully in the Letters on Design.

9. "That the self-existent and original cause of all things is not a necessary agent, but a Being endowed with liberty and choice." The students of philosophical necessity, and the disciples of Spinoza thought the very opposite of this proposition. An infinite and eternal Being must of necessity possess the qualities of liberty and choice, and, therefore, God is a free agent. Man in some degree has these qualities, even in his fallen state; hence his responsibility to God and society.

10. "That the self-existent Being, the supreme Cause of all things, must of necessity have infinite power." This proposition is self-evident and need not be enlarged on. The most common title of God is "The Almighty," an idea which the people get by looking at the mighty world and universe. The common impression is that nothing short of Omnipotence could have produced such a universe, and the common idea is the right one.

11. "That the supreme Cause and Author of all things must of necessity be infinitely wise." This proposition is evidently consequent upon those which have gone before, and also proved by the government of this world. Let the reader remember that our earth is travelling in one direction at the rate of six hundred miles an hour, and in another at the rate of a thousand miles in a minute. All the planets and moons are travelling at similar rates and in similar directions, all

moving around the sun. Yet they never clash nor block each other's way and cause a collision among the stars such as we have on our railways. It is very certain, however, that there would be a collision in the heavens if infinite wisdom did not guide the sun, moon, and stars.

12. "That the supreme Cause and Author of all things must of necessity be a Being of infinite goodness, justice, and truth, and all other moral perfections, such as become the supreme Governor and Judge of the world." These twelve reasons or arguments are something worthy of the attention and consideration of men and women, but the foolish denunciations of Atheists are not worthy of the attention given to them.

The text for this letter will be found in Jude, and at the 3rd verse. "Beloved, when I gave all diligence to write unto you of the common salvation, it was needful for me to write unto you, and exhort you that ye should earnestly contend for the faith which was once delivered unto the saints." If this exhortation was needful in the days of the Apostles, how much more so now in these evil days!

## LETTER I.

# Christianity and its Foundation.

THE great and primary truth that there is a God has obtained among men in all ages, and is the foundation doctrine of Christianity. Hence the first sentence in the old Creed is considered the starting point for a Christian, "I believe in God the Father Almighty, Maker of Heaven and Earth." The existence of an all-wise, all-knowing, Almighty, and eternal God is, without doubt, the sublimest conception that can enter the human mind. This conception, even as a scientific question, can have no equal, for it assumes to furnish the cause of causes, the ultimate fact in philosophy. It is, indeed, not only a fundamental truth, but the grand central truth of all other truths. All other truths in science, ethics, and Christianity radiate from this. It is, in fact, the source from which they all flow, the centre to which they all converge, and the one grand and sublime proposition to which they all bear witness. Several arguments are supplied for the existence of God, which I hope to present for the thoughtful consideration of your intelligent readers; but in this letter I shall give the *argumentum à priori*.

This argument proves the existence of the supreme Being, by the direct and immediate testimony of personal consciousness, and runs thus:—I am; I know that I am—that is, a personal, conscious, and intelligent being. But I have not had this personal conscious, intelligent existence very long, because my consciousness only reaches back a few years. But some one must have been in existence before me, and one possessing intelligence, for this reason, that non-intelligence cannot produce intelligence, as the effect can never be greater than the cause.

Therefore, this personal, conscious, and intelligent existence which I possess is itself the effect of an all-wise and first great cause, whom we call God, Who is from everlasting to everlasting. Again, I perceive by the evidence of my senses, that I am surrounded by space, which can have no bounds. And as there must have been some one always in existence, so there must always have been somewhere. As there never was nothing, so there never was nowhere. Do any of my readers wish to dispute this point? Then let them try to imagine nowhere. Where will you go to find nowhere? Will you go beyond the great solar system? You may go on for millions of miles, still there is somewhere. By the very effort to discover nowhere you perceive that there is everywhere. And if there is everywhere, and some one existing everywhere, this being must be the supreme

Being, who fills immensity with His presence, and is the eternal, uncaused, uncreated, underived, personal, and intelligent great God, Whom we worship and adore. Thus the Christian who has allowed his reason to lay hold on this argument can say with great delight and joy, Thou, O Lord God Almighty, art here and afar off, in the breeze, and in the air, in the sun, and in the light,—in the flowers and in the starry heavens over our heads. Thy throne is in the heavens, encompassed with the splendour of innumerable suns, blazing stars, rolling planets, and bright systems. I will close this short but forcible and terse argument for God's existence by inserting a poem which has been translated by Sir John Bowring from the Russian language. This poem will beautifully illustrate the two points of the above argument, viz., that God is infinite, eternal, uncaused, uncreated, and the all-sufficient Jehovah, Who is everywhere present in every part of everywhere, presiding over everywhere, and governing every being by His infinite power and supreme intelligence.

This poem has been translated into Japanese, by order of the Emperor, and is hung up, embroidered with gold, in the Temple of Jeddar. It has also been translated into the Chinese and Tartar languages, written on a piece of silk, and suspended in the Imperial Palace at Pekin.

O, Thou Eternal One! whose presence bright
All space doth occupy, all motion guide;
Unchanged through time's all devastating flight;
Thou only God: there is no God beside—
Being above all beings; Mighty One,
Whom none can comprehend and none express;
Who fill'st existence with Thyself alone;
Embracing all—supporting—ruling o'er—
Being whom we call God, and know no more.

In its sublime research, philosophy
May measure out the ocean deep—may count
The sands or the sun's rays—but, God, for Thee
There is no weight, nor measure; none can mount
Up to Thy mysteries: reason's brightest spark,
Though kindled by Thy light, in which would try
To trace Thy counsels, infinite and dark:
And thought is lost ere thought can soar so high,
Even like past moments in eternity.

Thou from primeval nothingness didst call
First chaos, then existence. Lord, on thee
Eternity had its foundation; all
Spring forth from Thee: of light, joy, harmony,
Sole origin; all life, all beauty, Thine.
Thy word created, and doth still create;
Thy splendour fills all space with rays divine.
Thou art and wert, and shall be, glorious, great,
Light-giving, life-sustaining potentate.

Thy chains the unmeasured universe surround,
Upheld by Thee, by Thee inspired with breath;
Thou the beginning with the end hast bound,
And beautifully mingled life and death;
As sparks mount upwards from the fiery blaze,
So suns are born, so worlds spring forth from Thee:
And as the spangles in the sunny rays
Shine round the silver snow, the pageantry
Of Heaven's bright army glitters in Thy praise.

A million torches lighted by Thy hand
Wander unwearied through the blue abyss;
They own Thy power, accomplish Thy command,
All gay with life, all eloquent with bliss.
What shall we call them? Piles of eternal light,—
A glorious company of golden streams—
Lamps of celestial ether burning bright;
Suns, lighting systems with their joyous beams;
*But Thou to these* art as the moon to night.

Yes, as a drop of water in the sea,
All this magnificence in Thee is lost;
What are a thousand worlds compared to thee,
Though they are marshalled like a mighty host;
Though multiplied by myriads, and arranged
In all the glory of sublimest thought?
Is but an atom in the balance weighed
Against Thy greatness, is a cypher brought
Against infinity? What am I, then? Nought.

Nought; but the effulgence of Thy light divine,
Pervading worlds, hath reach'd my bosom too.
Yes; in my spirit doth Thy spirit shine
As shines the sunbeam in a drop of dew.
Nought; but still I live and hope's pinions fly
Eager towards Thy presence; for in Thee
I live, and breathe, and dwell; aspiring high
Even to the throne of Thy Divinity.
I am, O God: and surely Thou must be.

Thou art; directing, guiding all, Thou art;
Direct my understanding then to Thee;
Control my spirit, guide my wand'ring heart:
Though but an atom, 'midst immensity.
Still I am something, fashioned by Thy hand:
I hold a middle rank, 'twixt heaven and earth,
On the last verge of mortal being stand;
Close to the realms where angels have their birth;
Just on the boundaries of the spirit land.

The chain of being is complete in me;
In me is matter's last gradation lost,
And the next step is spirit—Deity;
I can command the lightning, and am dust;
A monarch, and a slave; a worm, a god:
Whence came I here, and how? So marvellously
Constructed and conceived, unknown; this clod
Lives surely through some higher energy;
Far from itself, alone it could not be.

Creator, yes; Thy wisdom and Thy word
Created me; Thou source of life and good;
Thou spirit of my spirit, and my Lord;
Thy light, thy love, in their bright plenitude
Filled me with an immortal soul, to spring
Over the abyss of death, and bade it wear
The garments of eternal day, and wing
Its heavenly flight beyond this little sphere,
Even to its source—to Thee—its Author there.

O, Thou ineffable! O visions bless'd!
Though worthless our conceptions all of Thee,
Yet shall Thy shadowed image fill our breast,
And waft its homage to Thy Deity.
God: thus my lowly thoughts can soar;
Thus seek Thy presence—Being wise and good:
Midst Thy vast works admire, obey, adore;
And when the tongue is eloquent no more,
The soul shall speak in tears of gratitude.

## LETTER II.

# Christianity is True.

CHRISTIANITY is the greatest fact in the world, and Christ is the greatest fact in Christianity, being at once the founder and the foundation of the Christian system. The best religions of the Pagan world are Mahometanism and Buddhism, but neither has ever exerted any such good and elevating influence on the character and condition of mankind as Christianity. Christianity is rational and sublime in its doctrines, humane and beneficent in its precepts, pure and simple in its worship, and may be regarded as a completion of Judaism, which was the only true and divine religion before the advent of Jesus Christ. No doubt many of your readers will know that William Wilberforce, of glorious memory, and father of the late Bishop of Oxford, wrote "A Practical View of Christianity," for Christians in the higher and middle classes of society, but my object is to write a course of letters on Christianity for the artisans and working people of Aylesbury and Hundreds, and all England. I shall not advocate any special creed, nor write to justify the theological views

of any denomination, but New Testament Christianity, as it came from Heaven, and as it remains in all its freshness and truth in the Holy Scriptures.

I. In the first place, Christianity is true. Truth is something real; it is reality itself, as seen and uttered by the mind of God or man. Truth is the representation of things as they are, and, therefore its foundation is in the nature and relation of things. The facts of Christianity are as morally certain to the mind of the writer as the first axiom in Euclid is self-evident. The reasons for and grounds of Christianity will be given in future letters.

2. But I would add that Christianity is truth, backed by all other truth of every description. It receives support from every branch of science and true knowledge, and from every department of human history. All nature proclaims a God, the foundation doctrine of Christianity, and all her arrangements bear witness to His infinite power, wisdom, and goodness. It has been said by some that philosophy proves the impossibility of miracles, and so demonstrates the falsehood of Christianity. This, however, is a great mistake. The man who said it gave full proof that he was but a very imperfect student both of philosophy and Christianity. Because the truth is science encourages the belief in miracles; science presents us with many miracles, and shows that miraculous interpositions, suspending or inverting the laws of nature,

are to be expected whenever the interests of God's creatures render them necessary.

Again, some have said that science disproves a number of Christian doctrines, and thereby destroys the credit of Christianity. But this also is a great mistake, and shows its author wanting in the faculty of discrimination. The doctrines which true science disproves are not Christian doctrines, but only the doctrines of mistaken Christian men. Many Christians hold views and doctrines which are contrary to the words of Christ and works of nature, and in their efforts to defend them they often get defeated. But their defeat is not the defeat of Christianity, but only of errors and misconceptions which are injurious to its credit, and an hindrance to its progress.

3. Again, Christianity is truth of the highest and best kind. It has bearings on all our interests, whether temporal, spiritual, or eternal. It gives the most solemn and sublime revelations of the character of God, Divine Providence, and shows the way of salvation, the spirituality of our nature, and the solemnity of our destiny.

Christianity teaches the science of salvation, and the philosophy of holy living; and, as such, is the sum of all that is wise and good and true in the revelation of God to man.

Christianity has commended itself to the hearts and heads of the wisest, best, and greatest of the

human race. We find the greatest of scholars, the most celebrated of philosophers, the mightiest of minds, and the most lovely and beautiful of characters among its disciples.

Genius, learning, and sanctity, in all their striking and lovely and beautiful forms, cluster round it as their natural centre and abiding home. What better test of the truth of Christianity could we have than its full and cordial acceptance by the wisest and best men in the world since the advent of Christ?

A religious system which could satisfy the minds and win the admiration and devotion of such men as Cromwell and Milton, Baxter and Penn, Newton and Boyle, Faraday and Sir James Simpson, Prince Albert and W. E. Gladstone, Earl Cairns and Lord Selborne, the Duke of Argyll and the Earl of Shaftesbury, Sir Henry Havelock and the Rev. C. H. Spurgeon, besides some of the gravest thinkers and most devoted philanthropists, must have in it both the essence of truth and the sum of all excellences, human and Divine.

## LETTER III.

# Christianity is Good.

I THINK the following quotations will fully justify the insertion of this letter on the goodness of Christianity. Robert Owen, the leader of atheistic socialism, declared thirty years ago "That Christianity was the source of vice, disunion, and misery of every description, and that it had uniformly produced the greatest crimes, suffering, and misery to which human nature is liable." The writer heard Mr. Bradlaugh, M.P., say "That theology was an obstruction to science, and Christianity the greatest impediment to the progress of humanity." These things are repeated to-day in many towns and villages in England, and especially in Northampton. I should have thought the people's common sense would have taught them better than to believe the above, but many believe it, or say they do. So it is needful to write and prove that the whole character of Christianity is such as to render it impossible that it should produce vice and misery. There is not a vice which Christianity does not forbid and condemn. Nor is there a single doctrine of Christianity but what is

opposed to vice and misery of all kinds. The wonder is that people can believe anything to the contrary. History proves that Christianity is the most elevating, refining, and beneficent religious system in the world. Its tendency is to educate, civilize, and bless mankind, and to make them happy for time and eternity. It is profitable unto all things, having promise both of the life that now is and of that which is to come. It enlightens man's mind, and reforms his bad and vicious habits. It purifies man's heart, casting out the demons of wrath and pride and envy, and filling it with love and peace, with meekness, gentleness, and humility. A system which will produce the above must be good; but it does not stop here. It meets all his moral and spiritual needs. He is in darkness, and it gives him light. He is weak, and it gives him strength. He is guilty, and it brings him pardon. He is in dread of God, the great Judge, and it gives him confidence. He is afflicted, and it gives him patience and consolation. He is held in bondage by fear of death, and it sets him free and cheers him with hopes of immortal life. He has to die, and Christianity helps him to exult amidst the pains of dissolution; as death is but the entrance to a higher life, the crowning and completion of our blessedness. Christianity is good in a social sense. It fosters all our good, kind, natural feelings and affections. It teaches husbands to love their wives, and wives to

reverence their husbands. It teaches parents to love their children, and children to honour and obey their parents. It teaches brothers and sisters to love each other, and to dwell together in peace and unity. It teaches Christians to love one another, with pure hearts, fervently. It commands all to be faithful, truthful, just, and kind, to do to others as they would that others should do to them. Its moral precepts are the perfection of wisdom and goodness. It is impossible for anyone to conceive a religion higher or better on earth. It is impossible for men to reduce these precepts to practice without securing to themselves the richest and most exalted enjoyments of domestic, social, and spiritual life. It is good for, and friendly to, all the temporal interests of mankind. It is friendly to wealth. It takes men off from all the vices that tend to reduce them to want, and draws them to all the virtues that tend to secure to them abundance and comfort. Every Christian society, from the days of the earliest Church to the present age, has gradually increased in wealth. Though the early Christian Church was formed almost entirely of poor members, it became in course of time the richest organisation the world had ever seen. Two hundred years ago, the Nonconformists were the poorest part of the Christian Church in England; now they have much wealth. The Wesleyan Methodists were poorer still less than a hundred years ago;

now they have wealth beyond calculation. The Primitive Methodists on their first appearance were the poorest of all, yet now they are getting wealthy. The same thing holds good with regard to nations. From the moment they become Christian they begin to get rich. The nations of Christendom are the richest nations in the world. And those nations of Christendom that are most Christian are richer than those which are less Christian. For example, England and America. In short, whether we examine the tendency of Christian virtue, or the history of Christian Churches and Christian nations, the most unquestionable proofs present themselves that Christianity is the greatest friend to wealth the world has ever seen. Christianity is good and friendly to health. It heals the diseases both of the body and mind. A large proportion of diseases and pains which afflict mankind are the result of causes and vices which Christianity condemns, and in time removes. Christian nations are healthier and longer-lived than nations that are not Christian. As Christian nations becomes more Christian, the health of the people improves, and the number of their days is greatly increased. The Christian nations are those which have provided the largest number of hospitals and infirmaries for the sick and afflicted; so that Christ is the great physician in the physical as well as spiritual sense. Christianity is friendly to learning and

science. It encourages the study of God's works, and renders science and philosophy doubly interesting. It is, in a word, friendly to all the useful arts and sciences. Science can never come into serious competition with Christianity, as the science of the present day is the child of Christianity. The sciences of modern times came into existence in consequence of social and learned conditions which Christianity produced. Christianity is friendly to peace and freedom, to truth and happiness, to everything that is friendly to man. It is a foe to everything that is a foe to God and man. It is fully calculated to convert the earth into one great and glorious Paradise, and raise mankind to the highest state of enjoyment of which our nature is capable from first to last; and in every possible way Christianity has proved itself in the past, as it will do in the future, the best friend of the human race. Christianity is sublime in its doctrines, beneficent in its character, good in its tendency; and therefore capable of producing good of every kind. There is nothing else that can compete with it, and therefore nothing else that can compare with it. Every person with common sense will regard the words of Mr. Owen as the essence of absurdity, and those of Mr. Bradlaugh as the quintessence of rash presumption. In the face of all the good that Christianity has done, and is doing, Mr. Charles Bradlaugh, M.P., has the daring presumption to write "A Plea for Atheism," a copy

of which I have before me. Thousands of copies of this Atheistic Plea have been circulated, and especially among intelligent young men, in order to unsettle their religious views, and to get them ultimately to reject Christianity. Many of these young men are asking for such books as will meet fairly the difficulties which they have to encounter from the writings of Mr. Bradlaugh. I would name one or two which will help them. There is a mass and power of strength in the evidences of Christianity as presented in the following works :—"Butler's Analogy," "Lardner's Credibility," "Paley's Evidences," and Dr. Gregory's Letters; also "The Evidences of Christianity," as presented by Drs. Chalmers, Doddridge, Watson, Wilson, and A. Barnes; last, but not least, "The Bridge of History over the Gulf of Time," by Thomas Cooper, lecturer on the evidences of Christianity. This work is the *argumentum à posteriori*, historically considered, and is much more taking, convincing, and powerful than Dr. Paley's, which argues *à priori*. If the young men of the present day and many more who are advanced in years, and who are indulging in unnecessary fears for the safety of Christianity, will study the above works, they will become confirmed in the truth of Christianity, and well supplied with arguments to meet and demolish Mr. Charles Bradlaugh's "Plea for Atheism," and also the philosophical speculations

and sceptical works of the times. Modern infidelity, by whatever name it may be called—whether Socialism, Secularism, Atheism, or Rationalism—presents no arguments or proofs which have not been thoroughly answered and refuted over and over again. The style and wording in the presentation of modern Atheism is somewhat changed from that of days gone by, but the root of the matter is the same. It is the same old insipid dish of unbelief of bygone ages, only hashed up into a fresh stew to suit the tastes of modern unbelievers, sceptical philosophers, and doubting divines: yet we must meet them. Many good Christian people are fearful for the welfare of Christianity, because, forsooth, Infidelity has assumed to own and control the entire realm of science and philosophy, and is trying to make it appear that science and Christianity are antagonistic to each other. Mr. Bradlaugh, M.P., generally holds forth his Atheistic views and Godless theories in a room in London, called "The Hall of Science." True science is of God. Whatever is truth is of God, whether you find it in His Word or His world. All the departments of true science are so many branches of natural theology, and such men as Huxley, Tyndall, and Dr. Darwin are able exponents and are doing God's work, although they do not acknowledge it as Newton, Boyle, and Faraday did; yet God will make the folly of those sceptical philosophers praise Him.

## LETTER IV.

# Christianity Triumphant.

SEEING that Mr. Charles Bradlaugh, M.P., the High Priest of Infidelity in this country, is being popularised by the discussions in the House of Commons and throughout the country, and discredit cast on Christianity thereby, I hope that my letter will be a word in season. I deeply regret that a man of such mental powers and powerful eloquence should be identified with such a bad cause. My subject at present, however, is not Mr. Bradlaugh, but the great conflict between Christianity and Infidelity. Whether we consider the great number engaged in the conflict, or the vast importance of the interests at stake, we must acknowledge it to be a great fight. England is startled just now to know that Northampton, one of its large towns, is represented in Parliament by a Deist and an Atheist. Notwithstanding the action of Northampton, where infidels abound in thousands, and that infidel societies exist in England by hundreds, of which Mr. C. Bradlaugh is chief president, I am certain that Christianity will conquer, because it has within itself the elements of irresistible and deathless power, and therefore its final triumph is inevitable and absolutely certain. The predictions of,

and the reasons for, my faith that Christianity will conquer and ultimately triumph over Infidelity I now present to the attention of my readers.

1. And first, the Holy Scriptures predict the world-wide spread and triumph of Christianity. The Prophet Isaiah says, when speaking of the Messiah, the glorious Founder of Christianity, that "Of the increase of His government there shall be no end," and the same prophet adds that "The knowledge of the Lord shall fill the earth as the waters cover the sea." The Prophet Daniel tells us that he saw, in one of his visions, "That dominion, and glory, and a kingdom were given to the Son of Man, and that all people and nations, and languages should serve Him;" and Daniel then states that "His kingdom shall break in pieces and consume all other kingdoms, and stand for ever." The words of Christ and His Apostles are in perfect harmony with the predictions of the prophets. The Lord Jesus Christ assured His disciples that "the gates of hell should not prevail against His Church." He compares His Kingdom to a small seed, which gradually becomes a great tree, spreading out its branches on every hand. Paul, the intellectual giant among the Apostles, anticipated a time when all nations of the earth shall form one family of faith, and one brotherhood of love. He also speaks of Christ as Lord of all, and says that "He must reign till all His enemies are put under His feet." St. John, while on

the Isle of Patmos, who was permitted to see visions and hear heavenly sounds also, heard great voices in Heaven saying, "The Kingdoms of the world are become the Kingdoms of our Lord and of His Christ, and He shall reign for ever." To those of us who believe in the credibility, authenticity, and Divine authority of the sacred oracles, the above predictions are enough to satisfy us that Christianity will triumph over infidelity and every kind of opposition, and fill the whole earth. But there are people who do not believe in the truth and divinity of the Bible, and for them other kinds of proof must be given. I will now adduce some historic evidence that Christianity will ultimately triumph; allowing the past to throw light on the future to help us.

2. Christianity always has triumphed in the ages past. The history of Christianity from the beginning has been one of continual conflict; yet it has been one of constant victory. It had at first the whole world against it. The Jews opposed it with all their power. They slew its Blessed Founder; they persecuted His followers, and heaped reproaches on His doctrine. Yet Christianity moved on and prospered. The Gentiles next assailed it. Pagan philosophers argued and reasoned against it; Pagan priests denounced it; Heathen mobs fell foul of its ministers; and Gentile magistrates imprisoned, tortured, and destroyed its disciples; but all was vain. The Roman Empire, the mightiest the world had ever seen, lent all its force,

employed all its terrors and revolting cruelties, and most hideous forms of death to check its progress, till the blood of the saints was shed like water. Yet, the cause of Christianity moved on like the sun in its course, scattering the darkness. And thus Christianity made its way for ages and centuries. It gradually undermined the idolatrous systems of the nations, and brought them to the ground. It silenced the proud Pagan priest and the vain boasting of the heathen philosopher. It stilled the raging of the mob; it tired out the intolerance of the Gentile magistrate; it broke the force of evil customs; it destroyed deep-rooted prejudices, and reformed the most inveterate habits of vice. In a word, Christianity conquered the mighty empire which attempted to conquer it, and compelled the imperial court, the army, and the people to do it homage. When the savage barbarians of the North burst forth from their wilds, and broke the empire in pieces, and threw society into disorder and confusion, Christianity grappled with the fierce invaders, and gradually converted them from lawless and superstitious savages into disciples of Christ. It re-organised the dissolving elements of society, and formed new nations. It established good governments, and enacted wise and useful laws. It sowed the seeds of civil and religous liberty, and gave birth to higher and happier forms of civilization than the world had ever seen before. Christianity made its way into the surrounding regions

of Paganism, and planted churches, scattered darkness, elevated the scale of moral dignity, and gave life to the dead and joy to the sorrowful. Christianity held on its way through the dark ages, and wrestled with the ignorance and superstition, the vice and cruelty, of the times, and ceased not till it had changed the face of Europe in the days of Martin Luther, the celebrated reformer of the sixteenth century. The early advocates of Christianity, in controversy with the heathen of Greece and Rome, were accustomed to dwell with great stress and emphasis on the argument from its rapid and mightly propagation in the world. St. Chrysostom, of the fourth century, writes, "The Apostles of Christ were twelve, and they gained the whole world." I would remark that the twelve Apostles were poor men, artless, uneducated, destitute of all human advantages, protected by no authority, and yet they gained the then known world for Christ. This argument in the nineteenth century is intensified tenfold, and, therefore, let not Christians tremble and fear for Christianity. I do not fear; Christianity has within itself the qualities which will render its final triumph certain. All being well I will resume this argument, come down the stream of time, and show that Christianity has conquered infidelity in the past, which is a strong argument for the future success and triumph of our glorious Christianity.

## LETTER V.

# Christianity Triumphant.

*(Continued.)*

ACCORDING to my promise of last week I now send you another letter in proof that Christianity has triumphed over Infidelity in the past. Resuming my argument and historic journey at the sixteenth century, I shall come down the ages for three hundred years, pointing out the men who have done their best to overturn Christianity, but all in vain. During the last two or three centuries Christianity has been opposed from time to time by a host of infidels, sceptics, and unbelievers, some of them superior to Mr. Bradlaugh, M.P.; but Christianity has not only held her own during the mighty conflict, but has greatly extended her dominions.

1. First came Thomas Hobbes, a celebrated English philosoper and mathematician, in the days of the profligate King Charles II. He was a man of great mental powers, with a wonderful command of the English language, and a great amount of energy and activity—in this matter he was on a par with Mr. Charles Bradlaugh. He was appointed mathe-

matical tutor to the Prince of Wales, and favoured with the patronage of the King and Court, which gained for him the attention of the polite and learned. He was followed by Lord Edward Herbert, Viscount Bollingbrook, and the Earl of Shaftesbury, all sceptics, and all members of the nobility, readily obtaining the attention and consideration, not only of the upper ten, but of the reading and thoughtful classes in general. Then came a sceptical host of less exalted names, including Tindal, Toland, Morgan, Blount, Woolston, and Chubb. These all exerted their varied powers to destroy the credit of Christianity and bring men to set at naught its Divine authority. And they succeeded in shaking the faith of many, and producing a wide-spread indifference to religion in this country. Many foolishly fancied at this time that Christianity was exploded, and that all dispute as to its credibility, truth, and divinity might be considered at an end. All such were sadly out in their calculation, and grievously mistaken, as Christianity was not even disabled, much less destroyed. At the very hour when men were dreaming that Christianity was abolished, and the Christian forces were for ever vanquished, fresh warriors were under training who were to renew the strife, confound the foe, and achieve a mighty triumph.

The argumentative and philosophical warriors under training were Dr. Samuel Clarke, a great scholar and close reasoner, who published his celebrated "*Argumentum*

*à priori*," and Bishop Butler, a most profound reasoner, whose "Analogy of Religion" is the strongest, deepest, and most philosophical argument in defence of Christianity in the world, according to the opinion of the late Lord Brougham. By the keen logic and sweeping arguments of the above, followed by the eloquent voices of Messrs. Wesley and Whitfield, Christianity rallied her forces, raised the faint, and diffused her quickening power through the length and breadth of the land, and through many other lands, to an extent unknown before since the days of the Apostles. The sceptical hosts named above have disappeared, and the very names of the leaders are fast sinking into oblivion, their influence nearly gone, and their works seldom read.

2. Travelling down my historic journey, I come to the period when David Hume, a celebrated historian and philosophical writer, made his appearance amongst the foes of Christianity. He used his gigantic powers to cast discredit upon Christianity by asserting and trying to prove the impossibility of miracles. He did some harm to those who were not able to detect his sophisms; but the celebrated Dr. Campbell, in "Dissertation on Miracles," has pointed out Hume's assumptions, false statements, and equivocal expressions, and by it removed this objection to Christianity which was once considered a very formidable one.

Then came Edward Gibbon, the famous author of

the "Decline and Fall of the Roman Empire." Splendid as his history is, he has opened a masked battery against Christianity in many places, but especially in two chapters of the first volume, on the growth and progress of religion. His objections to Christianity, however, melt away like snow before the sun in the light of just and impartial criticism. Christianity need not fear the much-praised work of Gibbon, as it is so full of hypocrisy, perversion, and impurity, that it defeats itself. Next came Thomas Paine, with the determination to write a book, which should reason people out of the truth and Divinity of Christianity. Hence his work "The Age of Reason" for that purpose; but this apostle of mob-infidelity utterly failed, as did all his predecessors.

The writer of this letter has read "The Age of Reason," and can honestly pronounce it the most unreasonable book he ever read; because it displays perversions of truth, misquotations of the Bible, scurrility of language, and great ignorance of logic, which is the science of reason. But as this book made some stir in the world, it was deemed advisable to refute it; so Bishop Watson produced his celebrated "Apology," which has left Paine's work as helpless and harmless as a savage dog with his teeth drawn, or a ferocious cat with her claws filed. The evil wrought by Hume, Gibbon, and Paine was only for a short time. And then only like sceptical fogs, which hover over the

marshes of human depravity; whilst Christianity prospered and rose like the noble eagle which cuts the fogs, and clouds, and storms, in her passage to the sun.

3. Still lingering in the eighteenth century, I must make some remarks on the formidable attempts to abolish Christianity in France. During the latter portion of the last century in that country, men of great talents and boundless activity united their efforts to destroy the faith of the people, not only in Christ and Christianity, but in God and immortality. Learning and wit, poetry and science, and at last the sword of the magistrate, the rage of the mob, the craftiness of the politician, and the fierce fanaticism of misguided philanthropists were all employed for the extirpation of Christianity and the diffusion of infidelity. For a time the horrid attack on Christianity in France proved alarmingly successful. Now the enemies of Christianity believed that they had gained a final victory. How they raised their voices in a shout of triumph that shook the thrones and altars of every nation in Europe and made many fear!

The infidel philosophers and sceptical prophets predicted, and many believed, that the end of the Christian dispensation was at hand, and that a godless and lawless philosophy would henceforth govern the earth. Amid these convulsions, which shook France from centre to circumference, and made the hearts of the people of Christendom quake and fear:

for the Ark of God, Atheism clutched the falling sceptre and mounted the vacant throne. When once seated in the place of power and authority, Infidelity soon showed what she could and would do for mankind. She abolished the Christian Sabbath, proscribed Christianity, declared the Bible a fable, and death an eternal sleep. Reason was worshipped as a goddess, and an infamous woman adorned as its image. She promised the people liberty, and forged for them chains; she promised them a Paradise, but made an Aceldama; she promised a model republic, but built a pandemonium. Now the Reign of Terror began; order fled before anarchy; the nation became flooded with blood, and France herself trembled before the horrid spectre which she had invoked. Now was the time, if ever, for infidelity to overturn and supersede Christianity, but instead of France destroying Christianity she well-nigh destroyed herself.

It was enough. The fury of infidel fanaticism died away, as the true character of Atheism showed itself. A great reaction set in, and a revival of Christianity took place in France, and has been progressing ever since. France is becoming more religious and less atheistic every year. The works of the leading French authors are more sober in their tone, and more in favour of Christianity. In evidence of this I need only mention the fact that Professor Rénan, who was considered an able opponent of Christianity a few

years ago, has lately been in London giving lectures on Christianity. I conclude that if the eloquence of Robespierre, the power of Voltaire, the voice of Rousseau, the awful works of Volney, and the Reign of Terror could not destroy Christianity in France, neither will the black Atheism of Mr. Bradlaugh do it in England. Still it is very difficult to conceive it to be right for an avowed Atheist, who denies the existence of the Supreme Law-giver, to take his seat among the law-makers of a Christian country.

My next letter will be on the Infidelity of the Nineteenth Century, which will include Mr. Bradlaugh and his colleagues, Watts, Holyoake, &c, &c.

## LETTER VI.

# Infidelity of the Nineteenth Century.

MY fifth letter ended with a faint description of the Reign of Terror in France at the end of the last century. I showed the impossibility of destroying Christianity, and the absurdity of the attempt in that country. I now turn to Germany, where for nearly a century philosophical and clerical scepticism has been prevalent. Less than fifty years ago men were predicting the downfall of Christianity in the land of Luther. I allow that if perverted learning, abused education, and misdirected effort and ingenuity could have destroyed Christianity, the awful and horrid task would have been accomplished in that country. But learning and labour, intellectuality and ingenuity are all powerless against the Most High God. As the philosophical Atheists and revolutionary leaders found it impossible to destroy Christianity in France, so the atheistical philosophers and clerical sceptics have found it in Germany. As well might the sceptical astronomers try to prevent the sun's rising, or pluck him from his high position in the heavens, as the French Atheist, or German Neologist,

or English Secularist, try to destroy Christianity or prevent its onward march. Christianity is wonderfully and fast gaining ground again in the land of the great Reformer. The clergy are returning to the simple Gospel, as they find they have been deceived by false appearances. Even Dr. Strauss has been obliged to modify his views, and soften the horrors of his revolting onslaught on Christianity. Meantime the land of Martin Luther is cheered with the prospect of a second Reformation which shall be more Christian and beneficent than the first, because the talents which have been used in the promotion of Infidelity are now employed in the work of advancing Christianity.

Turn we now to Old England to see what Socialism, and Secularism, and Atheism have done towards abolishing Christianity during the present century. In the year 1810, Robert Owen, the father and founder of Socialism, made his appearance, and for a time created no small stir. He organized the unbelievers of this country, and sent forth in every direction sceptical agents and atheistical missionaries. They denounced Christianity as the greatest curse of mankind and the sole cause of all our domestic, social, and political troubles. They promised to give mankind a "New Moral World," on condition that they would give up Christianity and fully accept Socialism. A large number of people were beguiled

by the promises of those men. But the sad delusion was of short duration. The "New Moral World" proved a monstrous failure, and the bursting of this communistic bubble awakened many from their dreams and covered Socialism and its advocates with shame. Many of the people who had adopted the socialistic and atheistic views of Owen returned to the Church and Christianity. Even Robert Owen himself in course of time renounced Atheism and became a Spiritualist. His son, Robert Dale Owen, the most vigorous defender of Atheism, and a greater opponent of Christianity than Mr. C. Bradlaugh, M.P., is now a Christian, and is using his great powers and talents in preaching the Gospel in America. After the complete explosion of infidel Socialism, a number of its discomfited and scattered advocates rallied, and reorganised themselves for a renewed attack on Christianity under the name of Secularists. Now Christianity was to be abolished, the Church stormed, Ministers banished, the Bible burnt, and Religion was to be entirely abrogated. But Christianity is still in the land, and waging a successful warfare against Secularism, Scepticism, and Infidelity, and also making important aggressions on the domains of ignorance and impiety. It is calculated that the Rev. C. H. Spurgeon alone has done ten thousand times more to advance Christianity in twenty-one years than all the Infidels to reverse it during the present century.

During the last thirty or forty years, a dangerous party has made its appearance in the Church of England and in the fields of Science. I shall refer to the scepticism of scientific men in future, and content myself in this letter by touching on the sceptical gentlemen who hold office in our National Church.

Bishop Colenso and the authors of "Essays and Reviews," while they speak with respect of the great doctrines of natural religion, and of many of the moral teachings of Christ, strike at the very foundation of Christianity. They look on miracles as incredible or impossible, and on the Gospel records as in great part false and unworthy of trust. They look on Jesus Christ simply as a man, and not as a teacher clothed with Divine authority, and they accept just so much of His doctrine as agrees with their own conceptions, and practice just so much of His moral teaching as custom, taste, or inclination may render agreeable.

Those men cling to the name of Christian, while their views and principles are sceptical, and their proper place is not in the Church, but in the ranks of its adversaries. The authors of "Essay and Reviews" have been looked upon in England as very clever men and very wise indeed. Perhaps it would take a little of the conceit out of those authors if they did but know the opinion formed of them across the German Ocean. I will here call in Dr. Van Oosterzee, the

greatest divine in Holland, and let him tell us what the Germans think of the sceptical clergy in England. He says, "They are literally despised by German critics, as servile lackeys and men marching in the rear, and carrying on their conflict by using weapons already wrested from their friends in the van." Dr. Hengstenberg says the authors of "Essays and Reviews" have been trained in a German school. It is only the echo of German infidelity which we hear from the midst of the English Church. They appear to us (Germans) as parrots, with only this distinction, common among parrots, that they imitate more or less perfectly. The treatise of Temple is, in its scientific value, about equal to an essay written by the pupils of the middle classes of our colleges. The essay of Goodwin, on the "Mosaic Cosmogony," displays the assurance of one who receives the modern critical science from the second or tenth hand. I do not know what Bishop Temple and Dr. Goodwin, and the other learned authors will think of the above, but I am sure that if German scepticism failed to destroy Christianity in the land of Luther, its mere echo from some of the English clergy and a few philosophers will also fail in the land of Wesley and Whitfield. British Infidelity has been known ever since the explosion of infidel Socialism as Secularism, and its chief exponents have been Mr. Charles Watts, of Manchester, Mr. George Jacob Holyoake, of Bir-

mingham, and Mr. Charles Bradlaugh, of London. During the last twenty years Infidelity has lost the most vigorous of its defenders in England—viz., Mr. Joseph Barker, the venerable Thomas Cooper, and the learned George Sexton, Ph. D. L.L.D., who have left its ranks, and there is only one man left who can claim to be a great man—viz., Mr. Charles Bradlaugh, M.P. The writings of Buckle, and Mill, and Colenso have had some tendency to cast discredit on Bible Christianity; yet it is very instructive and consoling to a Christian to see how strangely the sceptical writers and Infidel prophets have miscalculated with regard to the success of their labours, writings, and predictions. Gibbon, Voltaire, Chesterfield, Hume, and Paine laboured most earnestly to overthrow Christianity; but the Most High God has thwarted their designs and overruled their evil purposes in a very wonderful manner. In Gibbon's hotel at Lake Leman is a room where Bibles are sold. The printing press from which Voltaire's infidel works were issued has been used to print the Word of God. Chesterfield's parlour, once an infidel club room, is now a vestry where Christians meet for prayer and praise. Hume predicted the death of Christianity in twenty years, but he has gone to his grave, and the first meeting of the Bible Society in Edinburgh was held in the room where the prince of sceptics died. Paine, on landing at New York, was foolish enough to

prophesy that in five years not a Bible would be found in the United States. But it is a fact that there are more Bible Societies to-day in America than in any other country in the world. Bishop Colenso, in one of his publications, uttered a kind of prophecy to the effect that in five years the clergy would see the truth of his views and came over to his side. Five years four times told have passed, but the clergy as a body are not crowding the track of the sceptical bishop.

And as for the authors of "Essays and Reviews," though they caused much excitement for a time, they have withdrawn from public view, leaving the Church to go on promoting Christianity. So much for the triumphs of Christianity in the past. And the history of the past may be taken as a prophecy of the future. Christianity has had no advantages in the past which it is not likely to have in the future. Infidelity is not likely to have any great advantages in the future which it has not had in the past. Nay, nor half as many, for as the light of truth and science shines on the darkness of Atheism, it will vanish like the last shades of night before the rising sun. We may, therefore, reasonably and safely calculate that the future history of Christianity will be one long record of glorious victories and splendid triumphs.

## LETTER VII.

# Faith and Science.

I DO not undervalue the researches of the real philosopher or the investigations of the true scientist, because their discoveries enrich our literature, confirm the facts of history, and frequently illustrate the truths of Christianity and establish the great verities of the Bible. By all means let the philosopher pursue his studies in the various walks of science and departments of nature. Let the chemist daily ply his laboratory to extort the secrets of nature; let the astronomer nightly turn his watchful eye to the heavens, exploring the depths of space; let the geologist turn over the stony leaves of the old terrestrial books and read the testimony of the rocks, and let the physiologist turn his mind to human physiology, with its wonderful organs and functions. The result of this study, observation, and experience (if honestly done in the true spirit of philosophy) will be to bring out more proofs of the power, wisdom, and goodness of God the Creator, Preserver, and Ruler of the Universe, and also supply fresh illustrations of the truths of Christianity.

"Christianus Sum," as an anxious inquirer in the fields of natural science, would be delighted to sit at the feet of such men as Professor Huxley, Professor Tyndall, Dr. Darwin, and Sir John Lubbock, when they speak as scientific observers and truly inductive philosophers; but when those celebrated scientists speak as philosophic theorists, exceeding the just boundaries of scientific precision, mistaking fictions for facts, theories for truths, and by it dishonour science and cast discredit on Christianity, he refuses to hear or follow them. It is the custom of Mr. Bradlaugh, M.P., his infidel colleagues, and some of the sceptical scientists, to speak very highly of science and philosophy, but very contemptuously of faith and Christianity. They would have us believe that faith, though natural in a child, is not becoming in a man—that men should govern themselves by science—that science should regulate our desires, and hopes, and our fears. These men have very extravagant ideas about the age in which we live. Because it excels preceding ages in matters of physical science, and in the art of making money, they imagine it excels them in every other respect. They fancy themselves on a lofty mountain of science, and look down on the Prophets and Apostles of ancient times with contempt. They say the Bible and Christianity were good enough for the childhood of our race, but we have come to maturity, and require something more philosophical.

Respect for the Bible and Christianity as Divine authorities is mental slavery, and men should now assert their independence in these days of modern discoveries. Mr. Bradlaugh declares that "Christianity in its theological teachings is an obstruction to the progress of science." But the Bible, the standard work of Christianity, on the other hand, without disparaging true science, speaks very highly of faith. We are now to look into this matter, and I shall endeavour to show that Christianity has nothing to fear from exact science, and true philosophy, and modern discoveries. In every science there are certain principles and fundamentals which lie at its foundation. There are facts and fundamentals in Christianity, and there are also facts and fundamentals in science. These should be distinctly stated, and rigidly adhered to, so that our reasoning may be satisfactory and our conclusions correct. Let us at once define faith and science, assigning to each its own province. By this mode of reasoning we shall find that Scripture and Nature have but one author.

1. What is faith? Faith as a mental operation is the assent of the mind and consent of the will which we give to a proposition or statement on testimony or evidence. Human faith is that whereby we believe what is told us by men. Old men tell us of things which took place long before we were born, and travellers tell us of things and places far away in

distant lands, and we believe their statements. This is faith, the objects of which are matters of human testimony or evidence. Divine faith is that founded on the authority of God, or it is the assent which we give to what is revealed by God. The Bible assumes throughout the existence of a personal, intelligent, Almighty, and all-wise God, Who is, from everlasting to everlasting, filling the regions of immensity with His presence. The Bible tells us that "without faith it is impossible to please God; that he who would please God must believe that He is, and that He is the rewarder of them that diligently seek Him." This verse requires that we believe in God's being and bounty, and it refers to Enoch's faith, for which he was taken to heaven without dying. He was a pious man and intelligent public teacher, and defended the truth in the days of Antediluvian Atheism. The Bible tells us that God created the world, and made man; and at different times and in various ways revealed His will and character to men. Furthermore, God tells us that in the fulness of time His Son was sent as a Teacher, Governor, and Saviour of the world. We believe these things, and this is faith. Divine faith assents to what is credible on the testimony of God; and, therefore, we know that His testimony is true and infallible.

2. What is science? Authors and scientists are not careful to define their terms with due discrimina-

tion and precision. "Science,' says Webster, "is a collection of general principles or truths arranged in systematic order." This is a correct definition of science as it exists in books of science; but I shall extend and exemplify it in this letter. An examination of the etymology of the word science will help us in our investigations, and also bring to light the fact that not more than five out of every hundred of the so-called scientists are so. (Latin *scientia*, from *scio*, I know.) So that the word "science" in its strictly literal sense means simply "knowledge." Science, then, is a systematic knowledge of things received through our senses, and obtained by reasoning from things already known.

The difference between faith and science will be easily understood and remembered if I put it thus, in the words of Mr. Barker: "A man tells us he is suffering great pain, and we believe him. This is faith. We suffer the pain in our own bodies. This is knowledge. A friend tells us there is a splendid rainbow arching the heavens, and we believe him. This is faith. We go out and see the beautiful rainbow for ourselves, This is knowledge. The astronomers tell us there will be an eclipse of the sun on a certain day next year; we believe the prediction, but next year we see the eclipse. This is knowledge." I have heard many of Mr. Bradlaugh's disciples talk about the science of geology destroying Christianity, and when one was

asked to define the science of geology, he floundered about, and utterly failed. The sceptics, infidels, and unbelievers, who talk so flippantly about science, are seldom either men of science or men of extensive reading on any subject. They are mostly unfeathered parrots, mimicking sounds which they do not understand. These men cannot do much harm to the science of Christianity, but may do much harm and evil among those of their own class, who do not stop to sift matters to the bottom. But the scientific works which are likely to do most harm to the educated people of this country are those of the late Sir Charles Lyell, Sir John Lubbock, Huxley, Tyndall, Darwin, and a few lesser lights. I shall try, however, to show the fallacies of the alleged antiquity of man, the absurdity of the "Monkey theory," and the folly of trying to make God's works contradict His words.

I shall finish this letter by continuing my definitions of science. Science, then, as existing in men's minds, is a recollection of what they have seen, felt, verified, or proved, while science as it exists in books is a systematic record of things seen, felt, verified, or proved by scientists. Thus the science of astronomy is a systematic statement of all that is known of the heavenly bodies. The science of chemistry is a systematic record of all that is known with regard to the substances of which the globe and its animal and vegetable products are composed. The science of

geography, as it exists in scientific books, is an orderly record of all that is known of the surface of the earth. The science of geology is a systematic statement of all that is known with regard to the crust of the earth and the natural history of our globe. The science of physiology is an orderly record of all that is known of plants, animals, and men, and also the laws by which the vegetable and animal kingdoms are governed. The science of music is only a systematic arrangement and record of all that is known of notation, melody, harmony, and rhythm. And so on with regard to the whole circle of the sciences. Let scientists and philosophers be modest, as they remember that the various sciences are only departments of systematised knowledge, or so many branches of natural theology leading up to and confirming revealed theology, which is the science of God and Divine things. Let the scientists be wise and never try to make science contradict Christianity or the Bible, because they are essentially one, and God is in both. The interpreters of the Bible and of science may differ, but the things they profess to explain perfectly agree. The appearances of inconsistency between the Bible and science come entirely from the imperfection of the expositors, and not the things themselves. Let us learn to labour and to wait for more light from the "Father of Lights," by which we shall see the perfect harmony between science and Christianity.

## LETTER VIII.

# Faith and Science.

*(Continued.)*

TO believe in God, as the Creator, Preserver, and Governor of all things and all beings, is perfectly reasonable. There is nothing unreasonable in Christianity nor in science when both are understood. Some things both in Christianity and philosophy may be above reason, but not against reason. They are alike the voice of God, uttering somewhat different but not contradictory oracles. They are not antagonists, but friends, as I hope fully to show before I have done. The Creator has made man with a capacity for faith, and also the ability to believe on testimony. Both Christianity and science demand faith in its disciples, and especially is this true in the disciples of philosophy. Because not more than five out of every hundred of the so-called philosophers and scientists can say "We know!" but "We believe what others say and write." Let me now try to show that the sceptics and infidels and scientists, who laugh at Christians, because they live and walk by faith, only exhibit their own folly.

1. The natural and spiritual worlds are alike with regard to the necessity of faith. Man, from the day of his birth to the day of his death, has to exercise faith, both in God and his fellow-men, in order to do business and live. The new-born babe lives by faith—instinctive trust in the order of things into which it is born. It knows nothing of the qualities of the food provided for it, yet it receives it trustfully, and is saved by faith and works. Now suppose that new-born children were to refuse to trust their mothers, and refuse the food provided for them, until they could prove, by chemical analysis, and physiological investigation, and scientific verification, that it was really suited and adapted to nourish and support their bodies. Such doubt and unbelief would soon bring them to the grave. The fact is, that every child (including Mr. Bradlaugh, M.P.,) is born into a dispensation which says, "He that believeth shall be saved; and he that believeth not shall perish," or die. When the child becomes old enough to understand and exercise his mental faculties and moral powers, he must still take his parentage on trust. All the proof that a child can have that his reputed parents are his real ones must be the proof given by testimony and strengthened by a number of probabilities. This is true of all, and, therefore, Lyell, Lubbock, Darwin, Huxley, Tyndall, and Bradlaugh never had a mathematical or ocular demonstration of their

parentage, and must have had faith in testimony in order to know their parents and enjoy the sweets of filial love. Again, if the young man would move along the path of life with safety, he must exercise faith in the judgment of his parents and as to what things are good or bad, as to what companions are suitable or unsuitable, as to what to study or not in order to improve. He must trust the testimony of his teachers as well as his parents, if he would be a scholar. In times of sickness he must have faith in his physician and the qualities of the medicine, or die. When he becomes a man, if he would live, he must live by faith. If he works, he must work in faith and trust his master, for he will seldom get his wages till his work is done. If he trades, he must trade in faith, for seldom are the gains of trade matters of knowledge, but matters of faith and trust. The system of credit, so very common and necessary in business, implies faith, as the very word "credit" comes from *Credo*, "I believe." If a man travels, he must at first do so in faith, as he has to put trust in his guides and faith in his guide-book written by another. The sailor who crosses the sea does so in faith, as he has to trust in the records of soundings he never made, and exercise faith in maps and charts he never verified or tested. The farmer has to plough and sow in faith, as he can never be certain what the weather and crop will be, or the markets, to secure him a just reward for his toil.

2. Turn we now to men of science and reputed philosophy. Here we find that very much of what we call science is only faith. Men of science in the strict sense of the term, we "know" are very rare indeed, and even those are men of faith, after all, to a large extent. For example, a man reads a number of works on astronomy, anatomy, botany, chemistry, geography, geology, history, mineralogy, music, medicine, physiology, and zoology, and having mastered their contents, he is called a man of science; while in truth and reality he is only a man of faith, trusting the authors of those works, and putting faith in their testimony. Furthermore, many of the writers and authors of such works as the above-mentioned are only men of faith, not having verified for themselves, but copied from others whose work and word they trusted. The case of "Christianus Sum" will serve as an illustration of what he means. He has read works on astronomy, anatomy, botany, chemistry, geography, geology, natural history, music, medicine, mineralogy, and can remember much of what he has read, and is considered by his friends in a certain sense to be a man of science; whereas he is only a man of faith in most of the sciences named above. He has never looked through a first-class telescope, to verify what he has read in astronomical works; he has never dissected a human body, to certify what he has read in works on anatomy and physiology; he has never

examined the collections of minerals and rocks in museums and geological cabinets, to verify his knowledge in these things; and therefore he has to exercise faith in the testimony of those who have verified them. "Christianus" has verified all that he has read on the science and art of music, and very much on experimental theology, and so far can say "I know." But in most of the scientific works read he is a man of faith like ninety-five of every hundred of the men whom we are accustomed to call men of science. Take, now, the most scientific students—Sir W. Thomson, Sir John Lubbock, Sir George Airey, Sir W. Gull, Dr. Huxley, Dr. Tyndall, Dr. Darwin, and Dr. Allman. The last-named gentleman is the president of the British Association for the Advancement of Science. The above are great scholars and profound scientists, yet they have to seek after truth in faith, as they can seldom tell beforehand what they shall discover. They have to search and investigate by faith. To wit—They must have faith in their predecessors, faith in their scientific instruments, faith in their established methods of scientific observation, and faith in the uniformity and constancy of the laws of nature. The law under which we are placed with regard to things natural, and the law under which we are placed with regard to things spiritual, are one and the same as to the necessity of faith. The most scientific are bound by the conditions of life and the nature of things to exercise

faith in order to investigate, discover, and verify the truths of which they can say, "We know by means of fullest verification." With regard to things natural and scientific, ten discover and twenty verify, and the thousands and even millions believe and put faith in their testimony.

3. Take now the case of Christian men and women who exercise faith in God, the laws of nature, and in the Bible. The grounds of their faith are far more reliable and trustworthy than those of most of the men of science. Let not the Godless men of science boast of their sure foundations, which are constantly changing, and ridicule the Christian, whose faith is in the unchangeable God and "Jesus Christ, who is the same yesterday, to-day, and for ever." We know that as, in the scientific world, ten discover, twenty verify, and the thousands believe, so in the Christian Scriptures, which contain the Creed of Christ and the only one which I care to defend. The twelve Apostles saw the Lord Jesus Christ, heard His words, beheld His miracles; and eight inspired writers, who had every opportunity for the fullest verification, have written what they saw, heard, and verified. We believe the testimony of those ten or twelve apostles who were common-sense men, and who were eye-witness of what they have written for our acceptance, faith, and practice. Intelligent Christians do not despise science but look on it as a comment on

Christianity, illustrating, demonstrating, and more fully unfolding the laws of nature, the works of God, and the precepts of Jesus Christ. We apprehend Jesus Christ as the Son of God, and believe Him to be the summary of God's eternal purposes and infinite operations, brought into a narrow compass, and put into a form in harmony with human methods of thought to suit our limited capacities. Christ is the power, the wisdom, and the goodness of God made visible and palpable; and Christianity is the true philosophy of the universe and its Divine Author. The most learned of natural philosophers in the past have been noted for their faith in Christianity as well as their faith in science and the laws of nature. Boyle, Newton, Locke, and Faraday were, and the greatest of living scientists are, as remarkable for their devotion to Christ as for their love to science. Those of us who believe in Christianity and science may be well content in such company.

## LETTER IX.

## Christianity, Science, and Miracles.

I have shown in former letters that science is nothing more nor less then systematised knowledge, and this is perfectly true with regard to the whole of the sciences, including theology. But theology is the most comprehensive of all the sciences, as God is the Creator of the material world, Governor of the moral world, Author of the laws of Nature, and Father of Christianity. Thus, while revealed theology is confined to Scriptural evidence and teaching, natural theology includes every branch of natural philosophy. Theology, considered in this wide and scientific aspect, shows the folly of the scientist who treats Christianity with contempt, and also the folly of the theological student who treats science with indifference. The scientist tells us that the material world is governed by fixed laws, and, therefore, miracles (one of the pillars of Christianity) are absolutely impossible. I have now to look into this matter, and show how foolish and unscientific the above assertion is, whether made by David Hume, or Professor Tyndall, or Dr. Darwin, or Mr. Bradlaugh.

1. What is a miracle? The answer to this question entirely depends upon which class of miracles you mean. The whole world, with its mechanics and chemistry and natural laws, is one vast assemblage of beneficent miracles, all planned and wrought out with skill and wisdom, which show the power and goodness of Almighty God. These miracles are God's usual and unusual ways of doing things for the good of His creatures. The sceptical philosopher who asserts that this world is governed by laws absolutely fixed, and unchangeable in their character, is very defective in his scientific observation and bold in his assertions. The words of the Right Hon. W. E. Gladstone show the absurdity of such assertions. "In the name of unchangeable laws, God is discharged from governing the world." If the above were true, God would be imprisoned in His own natural laws,—the very conception of which is the essence of absurdity. God is above natural laws, and He can suspend or supersede or invert them at pleasure, which He does every day for the good of His creatures. I shall now proceed to show this by a few remarks and scientific facts. The Old Testament contains the record of far more miracles than the New Testament. Miracles are interwoven with the whole texture of the Holy Scriptures, and nature itself is an infinite assemblage of astonishing wonders and astounding miracles. I shall leave the New

Testament miracles for a future letter, and name only a few of those of the Old Testament, with some of the miracles of pneumatics, hydrostatics, and chemistry, in this communication. The God of Nature, who is the all-wise God of the Bible, has wrought the most gigantic wonders on behalf of His creatures in all ages of the world, and is doing it still. He translated Enoch that he should not see death, which required the suspension of the laws of nature. The flood in the days of Noah could only be brought about by the most stupendous of all miracles. Jehovah increased the widow's cruse of oil and her barrel of meal, and suffered them not to fail till He had filled the land with plenty. The scientist sees in this the superaddition to nature—laws brought about for the good of a poor widow. God preserved Daniel in the lion's den, and his three companions in the furnace of fire. The analytical chemist can account for this only by declaring it above the laws of nature. The whole history of the Jewish people is one of miraculous character. Whenever it was necessary for their safety or comfort, Jehovah wrought miracles on their account. There is no authority in Scripture, nor is there any foundation in reason or science, for the notion that miracles have ceased. We do not assert or maintain that the miracles of nature are of the same kind as those of the Saviour and His Apostles. Yet there is good reason to believe that

miracles continue to have a place in God's providence. There are many incidents in the history of the Church and pious families and in nature which can only be accounted for by admitting them to be miraculous in character. The doctrine that miracles have ceased is neither good philosophy nor sound theology. Natural and supernatural works are equally easy to an Almighty and All-wise God, and both will be wrought as the safety and comfort of His people and creatures may require.

2. I now undertake to justify the above remarks by pointing out a standing miracle in connection with the sciences of pneumatics and chemistry. Take, for example, the composition of the atmosphere. The atmosphere is a mixture of three gases—viz., oxygen, nitrogen, and carbonic acid. These gases are all of different weights. Nitrogen is the lightest, oxygen next, while carbonic acid is nearly half as heavy again as either. Now, if you mix together in a glass things of different weights—like oil, water, and sand—the sand, which is the heaviest, will, when the vessel is left at rest, soon sink to the bottom; the oil, which is the lightest, will rise to the top; while the water, which is of medium weight, will take its place in the middle. Every chemist or philosopher worthy of the name knows that the above description of the said law is a correct one. But in the atmosphere this *natural* law is set aside, or inverted; whether the air

be disturbed or at rest, the lighter and the heavier gases continue mixed. I ask the learned chemist the reason of this, and he can only give this reason: it is a miracle. Truly this is a miracle, being contrary to the established laws of nature. It was necessary to the existence and well-being of men and animals that it should be so, and so it is, and the most learned can give no other reason or explanation. Thus every time man respires he breathes a miracle, and so we see and learn the solemn fact that while Hume and his sceptical followers were pronouncing miracles contrary to experience and impossible, they were inhaling a miracle at the very time. Let the intelligent Christian hold on to the faith of the Gospel and the truth of Christianity, being assured that they stand on the pillar and ground of truth.

3. Turn now to another of these miracles in connection with natural philosophy and hydrostatics. The law which I wish to examine is well known. The tendency of heat is to expand bodies, or make them lighter, and of cold to condense them, or make them heavier. If this law were allowed to operate unchecked, it would do endless mischief, and so in many cases it is inverted, altered, or suspended. For instance, the tendency of cold, down to a certain point, is to condense water, and the tendency of heat to expand it. The consequence is, that the colder particles of water sink to the bottom, while the

warmer ones rush or rise to the top. Hence the boiling of water in a pot over the fire. The water nearest the fire gets heated and rushes to the surface; while the water on the surface, exposed to the air, gets cooled and rushes to the bottom. This is a wise law of Nature, and a good and useful arrangement. But if this law were never suspended, by a miracle wrought by God, the results would be ruinous to man and beast, and the whole of Nature would be deranged. To explain: if the law were left to work unchecked, when water got cold enough to be turned into ice it would sink to the bottom. The surface of the water, left exposed to the cold, would be converted into ice with great speed, and the rivers, lakes, and shallow seas would become solid masses of ice. The result would be, the fish and the living creatures which keep them company would be destroyed. The warmth of spring and summer would be insufficient to thaw the frozen masses. The climates would be fatally deranged, and the race of man would perish. But God here performs a miracle for the good of His creatures. When the cold has brought the water within a few degrees of the freezing point, it instantly stops, and instead of making the ice still heavier begins to make it lighter. Hence the ice keeps on the top, protecting the water beneath, and preserving alive the fish and other living creatures which inhabit the water. When spring revisits the earth, the limited

quantity of ice is readily thawed, the genial temperature of the climate is preserved, and the whole course of nature continues in consequence of the miraculous interposition of God, the Father of mercies and miracles and Christianity. Moses and the prophets, Christ and His apostles appeared as messengers from God. They delivered their message, and produced mighty miracles as their credentials. No stronger proofs could have been given and the Church of God has been satisfied. God the Father is working miracles every day, in every part of the earth, not exactly for the same purpose as did Moses, Christ, and His Apostles, but to show His power, wisdom, and goodness to His creatures. He multiplies the loaves and fishes. The farmer scatters his little loaves of bread in the field, and they are multiplied thirty, fifty, and a hundredfold. He gives sight to the blind, hearing to the deaf, and life to the dead. We have been raised from the dead. There was a time when there was not a living thing on the face of the earth. The materials out of which we are formed were as lifeless as the dust on which we tread. He has given eyes to the blind, from blind unconscious matter, and life to dead matter; and He is doing this every day, in every part of the world. The processes of nature are all miracles, and it is only our ignorance, or the deadening power of custom, that prevents us from seeing and feeling them to be so. Thus we find that nature is full of miracles, and we shall also find that Scripture is the same, and God the author of both.

## LETTER X.

# The Miracles of the New Testament.

I shall take for granted the authenticity and credibility of the New Testament, in order to have a logical right to call in the Apostles as witnesses of the miracles recorded in the New Testament. Miracles and prophecies are two of the grand pillars on which Christianity stands. I purpose to speak of miracles in this letter, and the witnesses of the same, with answers to the objections to miracles. I have shown in a former letter that God is constantly working miracles in nature and providence for the good of His creatures, and therefore have every reason to believe that God would work miracles to estlabish and confirm the mission of His Son.

1. To illustrate what I mean, let me refer to the custom of sending an Ambassador to represent our British Government at a foreign court. To wit, the British Ambassador at Berlin, is the Right Honourable Lord Odo Russell, G.C.B., &c. When his Lordship presented himself at the seat of the German Government, charged with certain communications from his

Sovereign, he first showed his credentials of appointment. These credentials being satisfactory, whatever he may communicate in his official character is received with as much reliance and authority as if it were heard from the mouth of the British Sovereign herself. This special communication of Lord Russell at Berlin would be received as a revelation of the mind or will of his Sovereign. So, in the New Testament, we read that the Lord Jesus Christ appeared among men as an Ambassador from God the Father, charged with important proposals to the world and good news to mankind. Before we can receive Him as the Divine Ambassador, and His communication as a revelation from God, we must know the credentials of the Divine Ambassador, and have evidence that He is sent of God. The Lord Jesus, admitting the propriety of the demand, and the reason of the case, appealed to His works as His credentials. "The works that I do, they bear witness of Me." The Lord called up His miracles as His credentials. So he said "The blind receive their sight, the lame walk, the lepers are cleansed, the deaf hear, and the dead are raised up." These miracles were the credentials and proofs of His Divine mission from God to the sons of men. Nicodemus, who was a learned man, and a member of the Jewish Sanhedrim, saw His works, and was fully satisfied with His credentials. This Jewish ruler only expressed the common-sense conclusion of this

matter, when He said to Jesus, "Rabbi, we know that Thou art a Teacher come from God; for no man can do these miracles that Thou doest except God be with him." This testimony is very valuable, as it comes from a learned man and an eye-witness of the Lord's miracles. The Apostles argued in the same manner, and came to the same common-sense conclusion, and declared that "Jesus was a man approved of God by miracles, and wonders, and signs." The credentials of the apostles, as the subordinate agents of Christianity, are expressed in like manner—"God also bearing them witness, both with signs and wonders, and with divers miracles and gifts of the Holy Ghost." None can reasonably question the absolute certainty of such credentials. Mr. Woolston, an infidel, has the mental capacity and moral honesty to see and acknowledge the force of the logic supplied by the miracles of Christ and His Apostles. So he says, "I believe it will be granted on all hands that the restoring a person indisputably dead to life is a stupendous miracle, and that two or three such miracles, well attested and credibly reported, are enough to conciliate the belief that the author of them was a Divine agent, and invested with the power of God." If we can make good the evidence that Christ and His Apostles worked miracles in attestation of their Divine mission, and that the New Testament contains their teaching, then it is clear that Christianity is a Divine

revelation. Woolston says that the evidence supplied by two or three well-reported and well-attested resurrections of dead persons to life would be enough. I supply the number at once, which are well attested and credibly reported. The ruler's daughter raised to life in Capernaum; the widow's son raised to life in Nain; and Lazarus, who had been dead four days, raised at Bethany. The above persons, who were really dead, were raised to life by Jesus of Nazareth, and it was well attested and credibly reported by eye-witnesses and others who were the companions of the Apostles. I shall now consider the necessary qualifications for a true witness.

2. The probability of facts depends on the credibility of the testimony on which they rest. The chief qualifications which render a witness credible are these:— 1. That he has been an eye-witness, or had other satisfactory means of knowing the facts which he states or communicates. 2. That he possesses good common sense and sound judgment, and is free from all superstition. 3. That he be a person of habitual veracity; which we may judge to have been the case, if he obtained credit among his contemporaries in his own country and neighbourhood, and by his immediate successors. 4. That he be free from all personal interest, bias, or prejudice; and still more, if his testimony when given will bring to him as a consequence nothing but dishonour, loss, pain, or death.

If a witness in whom these qualifications exist be confirmed in his declarations or communications by the concurrent testimony of other unbiased and independent witnesses, then his testimony is raised to the highest degree of probability, and therefore is a moral certainty. The Apostles of Christ possessed all the qualifications mentioned above, and, therefore, we are fully justified in receiving their testimony, and relying on it as strictly true. The Apostles were actually present, and were eye-witnesses of the facts which they relate, and ear-witnesses of the words and discourses which they have written. Although Mark and Luke were not Apostles, nor Paul one of the Twelve, yet they were the companions of the Apostles and others who were present when Christ performed His miracles and uttered His discourses. The evidence of such witnesses is just overwhelming to an honest mind, and fully convincing and conclusive to any person seeking truth.

3. The objections to miracles and the testimony of the Apostles will now occupy the rest of this letter. The different kinds of evidence are the evidence of sense, the evidence of mathematical demonstration, and the evidence of testimony. The Apostles had the evidence of sense, but it is impossible for us to have this class of evidence. The miracles of Christ and His apostles can be rendered credible to us in this nineteenth century by no other evidence than

that of testimony. The infidels and the adversaries of Christianity have had wit and wisdom enough to see that the evidence of miracles must be overthrown in some way, or they must surrender the contest and accept Christianity as a Divine revelation. David Hume, the prince of sceptics, invented the argument, or rather the sophism, by which Christianity was to be swept away. This masterpiece of sophistry, as invented by Hume, may be stated in a few words, thus:—"No testimony can prove a miracle, because it is contrary to experience." As to the first part of this sophism, I beg to say that we have satisfactory evidence that the books of the New Testament were written by the persons to whom they are ascribed, and that they contain a faithful history of Christ and His words and works, and therefore His miracles are proved by honest testimony. The last part of Hume's sophism appears to be an insult to our common sense, when it asserts that miracles are contrary to experience. They might be contrary to his experience, but not contrary to the experience of all mankind, as asserted by him. It is certain that miracles were not contrary to the experience of Moses and the prophets, Christ and His Apostles. They might have been contrary to Hume's own experience. The Japanese prince said, "I will not believe that water becomes solid in winter, and men walk on it." The objection of Hume to miracles because he never saw one, as the Apostles

did, is about as wise as that of the Japanese prince who would not believe in ice because he never saw it, neither would he believe the testimony of Englishmen who had seen it. The king of French infidels, Voltaire, said, "I will not believe a miracle." This proved nothing against the miracles of our Lord, but it did prove he had shut the windows of his mind against light and honest testimony. Bishop Butler shows clearly, in the second part of his "Analogy," that "there is no presumption from analogy against miracles." Dr. Strauss and Professor Rénan have felt the force of the honest testimony of the Apostles, and have tried to break that force by admitting the testimony, but accounting for the miracles on the mythical principle. I trust the men of Aylesbury's famous Vale will hold on to the good old Gospel of Jesus Christ, which is the power of God unto salvation to every one that believeth. Let not the tracts and pamphlets of Mr. Bradlaugh lead them away from Christianity, which is the science of salvation and the philosophy of holy living. It is a principle of philosophy that every study requires an appropriate state of mind. It would be a waste of time to seek to interest the astronomer in zoology, or the musician in geology, or the botanist in alien subjects. Christianity is well adapted to meet the mental, moral, and spiritual requirements of mankind. But as every study requires an appropriate state of

mind, the Bible should be read with a clear head, a believing heart, a devout and reverent spirit. In addition to a careful and prayerful study of the Holy Scriptures, let the honest seeker after truth and its confirmation read the evidences of Christianity, as written by Dr. Paley, Dr. Cumming, and Thomas Cooper, and he will be fully satisfied if in sound mind. Butler has fully demonstrated that Christianity is in harmony with the laws and constitution of nature, and the experience of Christians is that it is capable to meet all the mental, moral, and spiritual requirements of mankind. Christianity is professed to-day by three hundred and thirty-five millions of the human race, and among them the greatest of scholars, the most celebrated of philosophers, the mightiest of minds, and the most beautiful of characters. The Christian religion still retains its old place beside the bed of death. Dr. Strauss cannot take the place of Paul, nor Professor Rénan that of John, nor Bradlaugh's secularism the place of the glorious Gospel.

I am very glad to learn that so many readers of the *Aylesbury News* are showing signs of deep interest in the Theological Letters. May they be fully established in the truth of Christianity! A striking and forcible illustration of the weakness of infidel arguments may be found in the remarks of an English miner, at the close of a lecture by Mr. C. Bradlaugh, M.P., who challenged anyone present to reply to his argument.

The collier arose, and said: "Maister Bradlaugh, me and my mate Jim were both Methodys, till one of these infidel chaps cam' this way. Jim turned infidel, and used to badger me about attending prayer-meetings; but one day, in the pit, a large cob of coal came down upon Jim's head. Jim thought he was killed—and, ah mon! but he did holler and cry to God!" Then turning to Mr. Bradlaugh, with a knowing look, he said, "Young man, there's now't like cobs of coal for knocking infidelity out of a man!" I have attended many lectures delivered by Mr. Bradlaugh, and have often heard him confounded by a collier, an old woman, or a child, and known him logically defeated in discussion by a Baptist or Methodist minister. Mr. G. J. Holyoake has written a pamphlet entitled, "The Logic of Death," which, when viewed in the light of reason and truth, should be called "The Death of Logic." *Veritas vincit.*

## LETTER XI.

# The Argument of Design.

WE have Government schools of design established in various parts of this country, in connection with the Central Training School at South Kensington. These schools are recognised, as they are under the control of the Science and Art Department of the Committee of Council on Education. But how many students, both male and female, have passed through those recognised schools of art and design, without any design of recognising the proofs of the existence of the Supreme Artist and great Architect of the universe supplied by such schools? I am anxious that your numerous readers should be interested in their mental journey through this great school of design, and therefore shall try to be clear, concise, and comprehensive. The word "design" is derived from the Latin *designo*, and signifies "I mark out," but means, in a general way, intention, scheme, purpose, and plan of action for some good and wise end. Every kind of work or production which shows signs and marks of design and contrivance, with parts put together for a purpose, must be

the work of an intelligent designer. The mark of design and contrivance in a watch are clear to any person of common sense. For we cannot conceive of any person of general information who could see and examine such a work of art as a watch, and discover the use of it, without inferring it was the work of a human mind contriving it, and making it a time-telling machine for a useful purpose. This watch argument, of which Dr. Paley has made so good use in his "Natural Theology," is justly popular and well known, and therefore I shall take the architectural one used by Paul in Hebrews iii. 4—"For every house is builded by some man; but He that built all things is God." In the construction of a house there is evidence of an intelligent architect and master builder, and in the wonderful construction of the universe there is evidence of a Divine Architect and a wise Master Builder. I have studied somewhat the work of design in architecture, having a relative a master builder, and that this figure may be well understood by the youngest readers, I will descend to a few particulars.

1. The architect must, first of all, use his mind, skill, and talents in drawing the plans and specifications of the house to be built. This design is a set of geometrical drawings drawn to a certain scale, representing the different sides, interior, and extent of the building. Such architectural designs, with their

various parts, are respectively termed "plan," "elevation," "section," and "details." The plan shows the shape of the building and area which it is to cover, the position of the walls, the situation of the rooms, passages, windows, fireplaces, &c. The elevations shows the outline of the whole building, with windows, doors, projections of chimneys, and intended ornamentations. The sections are representations of the interior on a vertical plan, supposed to pass through the building from top to bottom, on any line indicated on the ground plan. The details are representations of the horizontal and vertical sections of different rooms and parts of the building on a larger scale than that which is used for the general plan.

2. The builder and workmen must next exercise their minds, skill, judgment, and talents in order to comprehend the plans and specifications of the architect. The said building must be erected in exact conformity with the plan of the wise and intelligent designer, who is the architect. Every person can see at once what skill, knowledge, and intelligent contrivance the architect, builder, and workmen must possess in order to draw the plans and build the house according to the plans and specifications. What vast intelligence, mighty power, infinite wisdom, and great skill and contrivance God must possess as the Architect of the universe and the Builder of the world! No God! No Architect and Builder for the great house of the

world? Can you fancy a rude heap of bricks, stones, and timber, shot from a cart on the ground, forming themselves into a fine house? No, you cannot. It is not possible for anyone in a sound mind to fancy anything so foolish. Yet, David Hume would not recognise the force of the above argument, which was recognised by the Apostle Paul and every man of common sense.

In order to keep to the figure of the text, I will mention the building instinct of some animals. The beaver builds his dam as cleverly as if he had studied at the School of Mines, under Professor Huxley, and graduated as a civil engineer. Nay, the trained and accredited engineer will often blunder, as the bursting of reservoirs shows; but who ever heard of the bursting of a beaver's dam? The bee builds its cell as well as if it were a proficient in mathematics and geometry, though it never had a lesson even in common arithmetic. The bee is a first-rate mathematician, and works according to mathematical rules discovered by man thousands of years after the insect had been following them with perfect accuracy. The bird builds its nest as neatly, and makes it as secure and comfortable, as if it had studied architecture for years; yet it never had a single lesson, nor the benefit of a solitary example. The young linnets, hatched last summer, when all the nests for the season had been built, will build for themselves as early next

Spring as the older birds. All this without precept or example. In the cases of the architect, builder, and workmen, they do their work in consequence of the skill, wisdom, and reason which God has given them; but the beaver, the bee, and the bird move, and plan, and build by the instinct which their Creator has bestowed on them.

Whichever way we look in this great school of nature, we behold evidences of design, wisdom, intention, power, and goodness, bespeaking the existence of an all-wise God. We see an artist, say Titian, paint on canvass the portrait of a man, and we give him credit for skill as an artist. We see another, say a Michael Angelo, hew out the image of a man from a block of marble, and we give him credit for skill and wisdom of another kind. We give men credit for skill, design, power, and wisdom, when we behold their telescopes, which bring distant things near, and their microscopes, which make small things seem large. When we look at St. Paul's, London, we are compelled to admire the skill, design, contrivance, and ability of Sir Christopher Wren, the architect of it. But if we give credit for skill and wisdom to the artists who paint the picture, or hew the image of a man, what skill and wisdom shall we ascribe to the Divine Artist who produces the living man, a work infinitely more wonderful and perfect?

If we give the scientist credit for skill in optics, who

makes telescopes and microscopes, what amount of skill and wisdom and praise shall we ascribe to Him who made the eye, which embodies the whole science of optics? If we instructively praise the skill, ability, design, and wisdom of the architects who drew the plans and specifications of the Parthenon at Athens, St. Peter's at Rome, and St. Paul's in London, how much more should we admire, adore, and exalt and praise the God of all wisdom, power, skill, and goodness—the great Architect who planned the Universe, the Wise Builder of the world, and the Divine Artist who painted every flower and beautified the whole, and put so many pictures in this great school of design?

## LETTER XII.

# The Argument of Design.

*(Continued.)*

WHEN we examine a watch, a house, a number of machines, or a collection of paintings, we instinctively and instantly infer that they were designed by human skill, executed by human power, and that for a wise end and a useful purpose. It is not necessary that the artists, and machinists, and workmen should be present in order to discover their intelligence, design, wisdom, skill, and power, as we logically infer that from a close examination of their work in their absence. This is exactly the way in which we recognise the mental movements, supreme intelligence, great power, and wonderful works of God in the great school of nature. The Supreme Artist does not possess a human body like ours, for the manifestation of His mental movements and intellectual operations; nevertheless, we have the same kind of evidence of His skill and design and power, as of our fellow-men, only to a greater extent and to an infinitely greater perfection. For example: some years ago I was at Darlington, and made a careful examination of the first locomotive steam-engine

leap, and jump, and swim, and dive, and work at the bottom of the sea, and raise himself above the clouds. Man can move his limbs and members in almost every direction, at will. Look at his head; he can bend it either forward or backward, and turn it either to the right or to the left. His arm he can whirl about at pleasure, raise it to his head, place it at his side, stretch it out, or draw it back. His hand is a volume of mechanism and a miracle in itself, as shown by Sir Charles Bell. The parts of which it is composed, the manner in which they are put together, the exquisite sense of touch with which it is endowed, and its position before the eyes, at the extremity of the active, strong, and flexible arm, adapt it to a world of various operations. The leg is almost as free in its motions as the arm, and the foot is almost as wonderful in its structure, its position, and its uses as the hand. But if any member is to have the pre-eminence in this comparison, it is the tongue. By its wonderful power and flexibility it can modify the voice in an infinite variety of ways, and pronounce in rapid succession and with perfect distinctness the sounds represented by all words of all the languages in Europe or the world. Elihu Burritt, the learned blacksmith and great linguist, acquired the ability to speak above fifty languages. Therefore man is a more wonderful production than a steam-engine. Man, the noblest work of God, leaves the wonder-working

steam-engine behind in a vast multitude of other respects. The steam-engine cannot feed itself, but man can. The steam-engine cannot supply itself with water, and oil, and other necessaries for swift travelling, nor repair itself when injured by friction or bad usage. Man has the power to do all these things, and by it excels the steam-engine. The engine does not know when it requires a new supply of coal, or water or oil; but man knows when he wants refreshment. The steam-engine cannot tell when it has been long enough at work, or when its powers are overworked or strained; but man does, and calls in the medical doctor to repair his broken limb or give him tonics. And in what a variety of other things is the steam-engine excelled by man! The steam-engine can be made to puff and blow, to groan and whistle; and there its poor performances must stop. Man can think, and reason, and feel; he can love and hate; he can read, write, and talk. He can gaze with delight on the beauties and glories of creation, and enjoy a world of bliss. He can travel in thought through the wide universe, and find fresh matter for thought, wonder, and delight at every step. He can dig down into the depths of the earth, and read, in its various strata, the lessons of the past and behold the testimony of the rocks. He can rise to the heavens, he can weigh the planets, he can measure their orbits, he can track the paths of the comets, and can interpret the laws by which the

vast machinery of the mighty universe is governed. He can penetrate the future, predict the eclipses of the sun and moon, and tell when the far-off wandering comet shall return. He can analyse the various substances of the globe, detect the nature of the elements, dissect the bodies of animals and plants, and learn important lessons of health and of enjoyment. He can take the light, and command it to paint his pictures and take portraits of his friends. He can captivate the lightning and make it carry his messages along the wires to distant lands. He can build himself houses, make himself garments, plant himself gardens, and raise himself food. He can enjoy the pleasures of friendship, and increase the joys of social and domestic life. He can write books and impart knowledge to his fellow men, and read books written by others, and converse with the best of all ages and all lands. By the means of the printing press he can multiply means of instruction to others. There is no end to the powers and capabilities of man, but the poor steam-engine is very limited in its wonder-working power. The steam-engine, which is the most wonderful production of human ingenuity, is the creature of man's hands. No man is so foolish as to say that the steam-engine is the result of chance, but of superior mechanical skill, design, and contrivance. This is the point to be borne in mind, that if the existence of the steam-engine, with its various parts

put together for a purpose, proves the existence of intelligence, skill, and power in George Stephenson, how much more does the existence of Mr. Stephenson, with his wonderful powers of design, skill, and contrivance, prove the existence of an all-wise God, who created him and bestowed on him those talents and powers by which he has conferred a lasting boon on mankind.

## LETTER XIII.

# The Argument of Design.

(*Continued*).

THE constitution of man, his physiology, his anatomy, his psychology, his relations, and adaptation to nature, his instincts, sentiments, and mental faculties show us his origin, capacities, duties, and destiny, and also manifest the power, wisdom, and goodness of his all-wise and intelligent Creator. The science of human physiology, including as it does, anatomy, psychology, ontology, biology, morality, and theology, is to us the science of sciences, displaying the mind of God as written in the most perfect of His works, subject to our observation. I think that this science should be very profoundly and comprehensively studied, as it will show us man's place in nature, his relation to God and his fellow men, and his responsibilities to both, and also indicate the wisdom, intelligence, and goodness of God as reflected in His creature man. So very important was this subject in the estimation of Dr. Paley, that he studied anatomy and physiology after he was sixty, in order to write his natural theology.

The text for this letter is found in Psalm cxxxix. 14:—

"I will praise Thee; for I am fearfully and wonderfully made; marvellous are Thy works; and that my soul knoweth right well." This pious exclamation, and grateful resolution of the royal student, will be that of every one who studies the science of man carefully and reverently as it should be studied. The science of anatomy unfolds the wonders of the body, exhibiting the manifold functions and adaptations and uses of the framework of the human system. Here is a most elaborate and complicated piece of mechanism, presenting an economy of ways and means, uses and ends, and parts put together for a purpose truly wonderful, as far surpassing the work of man as the sunshine does the light of a candle. It was the study of the human body which converted the celebrated Doctor Galen from his scepticism and the Epicurean system in which he was trained, and also led him to write a book to convince others that man must be the work of an all-wise and intelligent Creator. The bones, organs, faculties, and functions of man are manifestly the result of design, and not the work of chance, but the production of an all-perfect Artist, even the Supreme Being whom we admire and adore as God. The reason why man is so inconceivably superior to any of his own works is that he had a Maker infinitely superior in power, skill, and intelligence to himself. We now turn from the works of man and study the works of God in man, where

we shall behold the evidences of design, wisdom, power, and goodness in our Creator who has made us rational beings. This fact is clear to the anatomist in every step he takes when dissecting the human system. This fact was so patent to the celebrated Dr. John Hunter, that he declared the study of anatomy showed the wisdom and goodness and power of God more than the study of any other science within the compass of his knowledge.

1. Take, for instance, the motions of the head. To enable the head to bend backward and forward, it must be attached to the neck with a hinge—and with a hinge our Maker has connected the head and neck. Two cords are also needed, the one to pull it back and the other to pull it forward; and God has provided them, and attached them to the head and chest, and given us the power to pull and let them go at pleasure. To keep the head steady and upright, it must be fastened all round with cords both strong and elastic. They are all supplied. These things are all provided in the best possible manner, the joints are oiled, and the cords kept soft, without any particular care on our part. Again, to enable the body to stand upright, and bear its own weight, some strong hard substance must run through it, from head to foot. And to enable the body to bend, turn, and twist, this hard, strong substance must be composed of many parts and joints, both loose and firmly tied

together. And to enable one to walk with comfort, the feet must be carefully framed and fixed for the special work allotted to them. All this is done to perfection in the human frame. The spinal column, or backbone, is so framed that it is both firm and flexible. There are just joints enough, and none too many. They are just of the kind best fitted to answer the end in view. And every jointed piece is tied so fast together, that it is hardly possible to force it out of its place without great violence. And, further, every joint is nicely oiled and cushioned to prevent pain from constant action. The ribs, which like walls guard our heart, our lungs, and other vital organs, are fitted and fastened to this central bony pillar, the backbone. This strong central pillar is firmly fixed on a good broad base. And the legs are so attached to the base as easily and steadily to support the whole. And yet the joints of the thigh and knee and ankle are so framed and fitted, and the different parts of the leg so compactly clasped and strapped together, and the cords stretched along to move the jointed parts are so laid in, and, where necessary, so strapped down with strong elastic bands, that, along with needful strength and steadiness, the greatest freedom of action is obtained. The hip joint is a ball and socket. To hold the ball more surely in the socket, the middle of the ball is fastened to the middle of the socket by a strong and flexible cord. To secure

the joint still further, the ball and socket are wrapped round and firmly fastened together outside, yet fastened in such a way and with such materials as to leave the working of the joint and the action of the limb quite free. At the knee, where another kind of joint was necessary, there another kind of joint is found, but a joint exactly adapted to the place. There the joint is a hinge, but the parts of the hinge are so closely and strongly fastened to each other on all sides by substances which, though they yield a little, never give way too much, and are so guarded, so carefully wrapped and strapped outside, that while we can step along with the utmost freedom, we are perfectly secure. And to be brief, we may remark that it is the same with all the joints and bones. They vary according to the places they occupy and the ends they have to serve, but everywhere in the whole human body the right thing is found in the right place, and the right means are used to secure the right end. And, as it is with the joints and bones of the system, so it is with the muscles, the organs, the senses, and mental and moral perceptions. No production of human skill or scientific ingenuity makes anything like a near approach to the skill displayed in the production and arrangement of the different parts of the human system.

2. Before I close this letter, let me come to a few particulars respecting the human system, and its

anatomy, physiology, mechanics, and chemistry. Men and women have two throats—one for conveying the food into the stomach, and the other for conveying air into the lungs. If the food we take into our mouths were to go down the opening for the air, we should be choked immediately. But this does not take place. Why? What is the reason? When the opening for the air is nearest the mouth, why does not the food slip down into the lungs and choke us? There is a valve so formed and so placed that as soon as we make the motion to swallow, the air passage closes, and the food slides over it, as over a drawbridge, into its own opening. When the food has passed over the bridge, the bridge rises, and lets the air pass freely to the lungs. This contrivance is one of the most perfect arrangements imaginable, and could not be the result of chance, but is a proof of God's great goodness to man. Take another instance in connection with the chemistry of the stomach. When the masticated food which is mingled with the saliva passes over the valve or drawbridge into the stomach, where it is met by the gastric juice which dissolves the food in chyme, it is found by chemical experiments that the gastric juice which is in the stomach, and is necessary for the digestion of food, has a very fine and needful property, which proves the wisdom and goodness of our Heavenly Father. This gastric juice has extra-

ordinary powers of dissolving substances which it touches or mixes with in the stomach. Yet it will not attack living matter or substance, but only act on dead matter. This again is a wonderful contrivance and proof of God's infinite benevolence in giving the gastric juice the power to dissolve and digest the flesh of animals without dissolving the flesh of the human stomach. What design, skill, wisdom, and goodness we behold in the above arrangement! Turn we now to the heart, the great centre of the physical system, and regulating organ of the circulation of the blood. The skilful apparatus by which the circulation is carried on shows an amount of skill and wise adaptation and kindly care worthy of the highest admiration and the devoutest gratitude. The heart is a perfect machine, by which the blood is made to carry to every nook and corner of the body the food taken in at the mouth. Part of the nourishment which we eat is carried to the most distant and minute parts of the body, even to our fingers' ends. All through the system the right kind of substance is given to the right organ. Each drop of blood is an infallible errand-boy, taking his parcels always to the right door and giving them into the right hands. The boys who take out the parcels in our cities and towns do make mistakes, but these crimson boys never make such mistakes. Our benevolent Creator has made this wonderfulorgan of circulation (the heart) to beat

four thousand two hundred times an hour, day and night, for repairing the waste and promoting the growth of the human body. At each beat of the heart two and a half ounces of blood are thrown into the arteries, which is at the rate of six hundred and fifty-six pounds an hour, or nearly eight tons a day. Mr. Bradlaugh might say that this wonderful operation is the result of chance, but our common sense draws another conclusion. The atheistic anatomist and sceptical philosopher sneeringly tell us that the human bone was not made by a God, as Christians believe, but that it is composed of gelatine, phosphorate of lime, &c., and that these are formed by peculiar combinations of oxygen, hydrogen, carbon, azote, phosphorous, &c. But the answer to that kind of atheistic nonsense is this. Can these sceptical anatomists and atheistical philosophers take these elements and compose or make a human bone? No! They have often been supplied with the gelatine and phosphorate of lime, &c., and requested to do so, but they never have yet, and this is the fullest proof that they cannot. The 245 bones of the human system were made and oiled and cushioned by God, so as to prevent pain when in action, and to promote facility of motion. How rational are the views of Dr. Paley, expressed in these words: "There is nothing, perhaps, which ought to move our gratitude more than the reflection, when considering the joints, how

well they wear. A limb shall swing upon its hinge, or play in its socket, many hundred times in an hour for sixty years together, without diminution of agility; which is a long time for anything to last, for anything so much worked as the joints are." To sum the whole up in a sentence or so, let us consider: The well-jointed bones, the motion of the limbs, the action of the heart, the structure of the arteries and veins, the provision of valves, the circulation of the blood through the lungs, its purification there by its contact with the air, the harmony preserved between the functions of the lungs and the functions of the brain, the nerves, the stomach, the liver, and the harmony of the whole system, are wonderful proofs of design and evidences of the power, wisdom, and goodness of our Heavenly Benefactor. Man, small as he is in size, is a world of wonders. He is an endless volume written within and without, full of cheering revelations of the power, wisdom, skill, intelligence, and goodness of the All-wise and Supreme Being. Thus, Atheism is false, and the glorious existence of God is a truth in harmony with all the truths of anatomy, physiology, and psychology. Surely every rational creature should exclaim with King David: "I will praise Thee, for I am fearfully and wonderfully made; marvellous are Thy works, and that my soul knoweth right well."

## LETTER XIV.

# The Five Senses.

DR. WATSON, of Edinburgh, has described the organs of sense, viz., seeing, hearing, smelling, tasting, and feeling, as the five gateways of knowledge. The learned doctor is perfectly accurate in his description, as these bodily organs of sense are the only means which the soul has of receiving ideas and impressions from the external world. Good John Bunyan has described these five senses in terse and tangible language in his "Holy War," which I will transfer to this letter, as it is so easy to remember. This good old writer says that the "Famous town of Mansoul had five gates in at which to come, out at which to go. The names of the gates were these—Ear-gate, Eye-gate, Mouth-gate, Nose-gate, and Feel-gate." The object of this letter is to show that the wonderful arrangements of those five organs, and their wise adaptation to the objects and elements of nature and the world, prove the existence of God infinitely wise, benevolent, and good. And as my name is "Christianus Sum," I am anxious to show your readers that true philosophy is in perfect

harmony with Christianity, and therefore they will find the text for this letter in Prov. xx. 12:—"The hearing ear, and the seeing eye, the Lord hath made even both of them." Why does the wise and royal student name only two of the senses, to the exclusion of the others, when God made the whole body? The answer to this question lies in this direction—the ear and the eye would be the chief gateways to the soul; and so Solomon names them, leaving his readers to take the rest for granted. In my description of these organs and their uses, I shall employ popular language, and avoid technical phraseology and metaphysical refinement, as I write for the general reader and not for the medical student.

1. The organ of sight is an optical instrument of the most perfect construction. This organ is the sense which receives impressions from rays of light, reflected from luminous objects, meeting and forming images on the retina of the eye. The eye may be considered as a series of lenses; because the rays of light proceed from luminous objects, enter the eye through the pupil in the centre, and paint on the retina at the back of it an image, which is conveyed to the brain by the optic nerve and on the soul by this Divine arrangement. The eye is placed in the most convenient and advantageous position to answer its end. Placed in the front of the head, so far from the ground, it enables us to

see our way, to direct our steps, to go about our work, and perform our varied duties to the best advantage possible. To keep it from harm it is placed a little more inward than the bulk of the face, and carefully walled round with hardy substances, and over-arched and protected by the forehead and eye-brows. It is supplied with lids and eyelashes to preserve it, and the lids are supplied with muscles so contrived as to secure the most prompt and rapid motion, and so fit them in the best way possible to answer their important ends. Again, to keep the eye moist, or cleanse it from insects and dust, and so secure its efficiency, a wash is provided, and the moisture, when no longer needed, is conveyed to the nose through a hole made in bone as large as a goose quill. Dr. Paley asks the question "Can any pipe or outlet for carrying off the waste liquor from a dye-house more manifestly prove contrivance?" At this season of the year men frequently go to bed with their eyes full of dust from the hay and harvest fields, but in the morning it is all gone by the above benevolent design and wise contrivance of our All-wise Maker. If man had been the product of a careless or blundering power, and the arrangement of man's organs left to blind chance, the eye might have been rendered comparatively useless by being placed in the foot or on the top of the head. Let us compare the eye with the telescope, by which we shall soon perceive

the superiority of the work of the Divine Artist to the work of man. The telescope is a wonderful instrument, but it is a poor thing compared with the human eye. The eye can do many things which the telescope can not do, while the telescope can do nothing without the eye. The fact is, the telescope, microscope, and all optical instruments are dependent on the eye both for their existence and use. If we ascribe skill, wisdom, and power to Galileo and Sir Isaac Newton for inventing telescopes to enable us to see the heavenly bodies, how much more should we ascribe power, wisdom, skill, and goodness to Almighty God, who made both the heavenly bodies and our eyes to see them. A word or two more about the eye before we pass on to the next organ of sense. The eye is the window of the soul, and an inlet to an endless variety of knowledge and a great amount of enjoyment. The eye is exactly adapted to the world in which we live, the world with its light and various forms and colours. To this organ of sight we are especially indebted for our ideas of the sublime, grand, and beautiful in nature. By means of the eye we can see the features of the human face, with its various forms and colours, its looks of love, its expressions of sympathy, its smiles of joy, its tears of gratitude, which give us much pleasure. By means of the eye we can feast our minds on all that is beautiful on earth and glorious in the heavens above. We gaze with *delight* on the lofty mountains, the lovely valleys, the

flowing streams, the deep forests, the wide-spreading lawns, the heaving ocean, the foaming beach, the rugged cliff, the thundering cataract, and all that is grand and sublime in nature. We can feast the soul by lifting the eye to the heavens, and then contemplate the black and fiery clouds, the darkness and the light, the glories of the opening and closing day, the sun, moon, and stars, in their far-sweeping orbits, measure their dimensions, weigh them in the balance and ascertain their laws and relations till our minds are filled with delight. If any of your readers can study the human eye without seeing in it formation, adaptation, and capabilities, wonderful design, wisdom, and goodness on the part of our great Creator, they must be morally blind.

2. The sense of hearing shall next have our consideration. This organ of hearing, in its wonderful construction and the value of its uses, is second only to the sense of sight. The ear is the organ through which we receive impressions by means of sound—that is, undulations of the air caused by sounding bodies, the various musical instruments, &c. If the eye be the window of the soul, the ear may be compared to the music-hall of the soul, which conveys the voices of nature to the spiritual dweller within. What a great variety of sounds the ear transmits to the mind, through its music-hall; for the quality of tones is as various as the pitch. It is well ascertained

that no two voices, no two instruments, are exactly alike. Violins and voices so vary in qualities, such as roundness, sweetness, loudness, or softness of tone, that one may be worth a thousand pounds and the other not more than a thousand pence. The sound waves vary in size, or nearness, or intensity, according to the character of the sounding body creating the waves or undulations. The notes of birds, the cries of animals, the voices of children, the deeper tones of men, the higher notes of women, the great variety of tones of all the musical instruments in an orchestra, are all different, and the possible gradations of tones are almost infinite. By what means do we know all this? By the wonderful capabilities of the ear to convey, and the mind to understand, the various tones and voices around us. No God? Who made this wonderful medium of communication between the external world and the soul, if there be no God? Was this marvellous organ, with its acoustic nerves and beautiful apparatus for collecting and conveying sounds to the soul, built without the great and wise Designer? No. A thousand times no. To believe that it was, requires far more faith than to believe all the doctrines of the Christian religion. Before we leave this organ of hearing, we would hear a little more respecting its great value and many uses. We learn through the ear a multitude of things, which, without it, we could never know, and we receive

through the ear a number of joys and pleasures, without which we could never taste. The ear is a medium of intercourse between man and man, and to some extent between man and the universe at large. By it we hear the voice of warning, the word of encouragement, the threat of a foe, the cheer of a friend, the wail of sorrow, the shout of joy, the murmur of the brook, and the roar of thunder. By the ear a world of delights and pleasures come to us from music and oratory. In passing through Wales, the land of harps and musicians, what pleasures we derive from the rich melodies and fine harmonies of this musical people! By means of the ear the infinite world of vocal and instrumental music brings us enjoyments of sweet sounds from the German, Italian, French, and English schools of music. Who has not been solemnized by Mozart's "Requiem," and agitated by Bach's "Passion Music," and tranquilized by Haydn's "Symphonies," and almost Christianized by Handel's "Messiah," and enlightened by Sullivan's "Light of the World," and, above all, enjoyed the psalmody of the sanctuary? To what end would all the above exist if we were deprived of this organ of hearing? Nay, all the above musical works would have had no existence, if the great Creator had not made the organ of hearing with its wonderful capabilities, and that for man's pleasure and happiness. To the ear we are indebted for music, language, books,

social enjoyment, and for the treasures of wisdom and knowledge with which our minds are enriched and hearts cheered. By the medium of the ear we enjoy the thrilling eloquence of Dr. Magee, Bishop of Peterborough, the long-resounding eloquence and musical voice of C. H. Spurgeon, the graphic beauty of Dr. Puncheon, the majestic force of Dr. Parker, the rich rhythm and the impressive genius of G. W. E. Russell, M.P., the fluent tones of John Bright, the brilliant surprises of a Lord Beaconsfield, and the classic purity, soaring imagination, and elocutionary perfection of W. E. Gladstone. What vast riches of pleasure and enjoyment pass into the "Famous Town of Man-soul through Ear-gate." The ear shows many proofs of the design, contrivance, wisdom, power and goodness of our Blessed Creator. After all it is the soul that hears, and the ear is but the medium, and surely that soul is deaf that cannot hear the voice of its great Creator.

3. The sense of smelling is the organ by which we receive impressions from external objects through the olfactory nerves. The qualities in bodies which act upon the nerves of smell are called odours, perfumes, fragrance, and stench, which produce sensations agreeable and disagreeable. The capacity to smell is another wonderful arrangement with marks of wise and benevolent contrivance for our pleasure and caution. By the means of this organ we are made sensible of

the presence of powers which we could neither see nor hear. So by it we become aware of the hidden qualities in herbs, flowers, and fruits, and in many other substances both agreeable and disagreeable. By means of this sense we are admonished of a host of lurking dangers, and effectually warned to avoid them. In this way we are assisted in our choice of articles of food and drink. In this way we are warned against breathing noxious gases, inhaling the odours of putrifying substances, and from staying in the vicinity of stench traps and those who neglect personal cleanliness. No doubt the sense of smell is to teach us when our persons, houses, and towns need purification. So by this very sense of smell we see the goodness of our God, as we can by its exercise surround ourselves with a multitude of herbs and flowers, and trees, which, while they please the eye, regale the sense of smell with a rich variety of grateful odours.

4. The organ of tasting is the sense through which we receive impressions and sensations by means of the mouth, lips, palate, and tongue, and are termed organs of taste. Bunyan says "Mouth-gate." This sense is more special, and confined to the mouth, throat, and nasal cavities, but centres specially on the tongue. This sense is a benevolent contrivance and a similar endowment to that of smell. While in company with smell it guides us in our choice of articles of

diet, it helps to keep us from poisons, pain, and death, and also opens to us another source of rich enjoyment.

5. The organ of feeling or touch is the sense by which we perceive the qualities of bodies in general—such as heat and cold, hardness and softness, roughness and smoothness, motion, extension, and solidity. These nerves of tactility are spread over the whole surface of the body, but the hand is the principal organ in the sense of touch. This endowment is a proof of God's goodness to man, as it is a source of varied pleasures. Dr. Graham says: "Man is the soul of the world—the intellectual and moral sensorium of Nature." But it is equally true that the soul of man could have no communication with the world around, but through the medium of the five senses which we have now considered. Three of these organs of sense have a double apparatus at the external extremity of the nerves of sense, which show the wisdom and benevolent purpose of our Creator. The sense of hearing has two ears, the sense of seeing has two eyes, the sense of smell has two nostrils. But the double apparatus possessed by three of the senses does not cause a double sensation or perception, but strengthens the single sensation or perception. Thus, the two ears do not cause a double sound, but strengthens the single sound; nor do the two nostrils cause a double, but a stronger, smell; so

when the eyes are in a healthy condition, they do not see two objects, but one. Here we see all these parts put together for a wise purpose and a good end. Every bodily sense is made a channel of pleasure and the means of gratification and delight. God makes all Nature beauty to the eye, music to the ear, and fragance to the nostrils, nor has He left the organs of taste and touch barren of pleasures. The more we study the human system, the more we are convinced of the power, wisdom, and goodness of our great Creator, and our continual dependence on Him. These studies in the school of design, if conducted seriously, as they should be, will excite our astonishment, and call out our gratitude to God; and, therefore, I shall continue them in the next Letter, D.V.

## LETTER XV.

# The Mental Powers.

THE subject of this letter is psychology, and the object of it is to point out the wisdom and goodness of God in the creation and arrangement of man's mental powers and intellectual faculties. Man is a compound being, consisting of body and soul, matter and mind; the former he has in common with inferior animals, and the latter with the highest order of created beings. The one is physical and the other metaphysical; the one material and the other spiritual; the one mortal and the other immortal. Scientists use the terms physiology regarding the one and psychology regarding the other. In previous letters I have pointed out the marks of design in man's anatomy and physiology, and, therefore, in this I shall confine my remarks to psychology, the science of the soul, or the spiritual principle in man. In this country the science of psychology is better known to the general reader as metaphysics and mental philosophy. The "ontology" of Dr. Watts, the "pneumatology" of Dr. Doddridge, the "essay" of John Locke, the "lectures" of Dr. Brown, the "outlines" of Arch-

bishop Thomson, the "philosophy" of Sir W. Hamilton would all be designated psychology in the land of Luther, where mental philosophers abound. Although the mind, from its spiritual and metaphysical nature, exhibits fewer marks of design and contrivance than our material organisation, yet, from its nobler nature and higher attributes, it supplies a more profound and impressive evidence of Divine Wisdom and goodness. If the adaptation of the five senses to external nature, and the suitability of the objects of nature to the five senses, prove the wisdom of God, no less does the adaptation of the various faculties of the mind to each establish the same great truth. I shall not attempt to give a complete category of man's mental powers, as that would require a book, but only point out the principal faculties, to illustrate the wisdom of our Creator.

1. Take the mental power known as personal consciousness. By the exercise of this faculty we can recognise our own being and identity as distinct from other people; also the various thoughts and feelings which pass in our minds. This faculty is the foundation of all knowledge, and without it no other mental power could exist, or be exercised if it did exist. In a word, the exercise of this mental power is the soul of man recognising its own being and thereby proving its superiority over the material body, which has no power of recognition. The sun knows nothing of his

brightness, nor the moon of her light, nor the stars of their shining, nor the air of its oxygen, nor the earth of its fruits, nor the body of its motions; but the soul, by its personal consciousness, has the power to recognise the whole. Darwinism leaves man wtthout a soul, and traces man's origin to the spore of a seaweed which was created about 300 million years ago. Huxleyism traces man's origin to his simian ancestors, the monkeys. Is it not passing strange that the disciples of Dr. Darwin and Professor Huxley should be so proud of their ancestors? In the wonderful capabilities of the soul and its power of recognition I can see a faint reflection of the infinite intelligence of God, but no relation to a seaweed or monkey.

2. The next faculty in order will be sensation. By the exercise of this mental power the soul receives impressions and thoughts from without, through the five gateways of knowledge, the five senses. I have already dwelt on the physical aspects of the senses, and now wish the reader to look within the bodily senses to the mind, which only has the power of perception through these senses. Without this function of sensation the exercise of consciousness would be confined to a very narrow range of reflection by the external world being shut out. But God, Who made the soul with such wonderful capacities for acquiring knowledge, has also opened the five gateways of perception through the senses, so that the mind of man

might become acquainted with the beauties of creation and providence. The faculty of sensation is the inlet of much knowledge and a thousand pleasures, and all of them proclaim the wisdom and goodness of God.

3. The next intellectual operation is understanding. By this term I mean the power of the mind to perceive a proposition or fact and exercise judgment upon the same. Without this noble faculty we might receive ideas and impressions from without, but should not be able to give them form and character, so as to hold sound and intelligent converse with one another. The mental faculty of understanding evidently includes perception and conception, by which the soul becomes cognizant of simple elementary truths. This faculty is styled by Shakespeare "the mind's eye." I have never read or heard of a monkey learning the simple elements of common arithmetic, or trying to master the elements of geometry. I am of opinion that both Dr. Darwin and Professor Huxley have missed the link which would connect man with the monkey. Man has the power to learn and understand the sciences, ethics and religion. What a proof is this that man can trace his origin to a higher than a monkey source or the sea-weed!

4. The faculty of memory is the soul recalling past ideas and impressions, and retaining them in the mind. Space will not allow me to enter into a long

and philosophical description of this faculty, but without this power we could make no progress in knowledge nor derive any benefit from experience. All our knowledge would pass away as it came, like the scenes of a performing diorama, and leave the mind vacant and incapable of improvement. Memory enables man to live life over again, to derive his knowledge from experience, to build truth upon truth, and to add to his stock of knowledge through every period of his life. By this mental power we have reflection; by reflection we receive ideas of mind; through the medium of consciousness, just as by sensation, we receive ideas of external nature, through the senses. Now, the faculty of memory preserves both classes of ideas as in a depository; and recollection calls them up when they are required. Thus memory is wisely adapted to sensation and reflection as the recipient of the ideas they transmit, without which we could not make progress. What a proof of the existence of the infinite mind from which we receive our mental powers!

5. Reason is a noble faculty, by which man is distinguished above all other creatures and things, including monkeys and sea-weeds. By this power of the mind man can distinguish truth from error and deduce one truth from another. Without this noble faculty of reason our knowledge could never go beyond simple propositions and self-evident truths.

Reason enables us to examine abstract truths, to apply the first principles of knowledge in the discovery of remoter truths, and extend the bounds of our knowledge in every science, literature, and religion. By the exercise of this sublime power Lord Bacon wrote his "Novum Organum," Newton his "Principia," Sir William Herschell invented his telescope, and Archbishop Whately composed his "Work on Logic." What a God-like faculty is reason! No man can become an Atheist till he has reasoned himself out of the right use of reason. Did Drs. Darwin and Huxley ever know monkeys study astronomy or invent telescopes, or write books on logic?

6. The next faculty which I shall notice is Imagination. This is the power by which we may separate and variously combine our ideas and thoughts. By the exercise of this power we have the power to modify our ideas and conceptions, so as to form new mental creations. Without this faculty the mind would have had its thoughts confined to simple facts and propositions, and truth itself would have been divested of much of its charm and power to attract. Imagination imparts drapery, colour, and life to our thoughts, gives beautiful views and combinations to the objects of sense. Poetry, oratory, and the fine arts derive their power to charm and attract from imagination. Dr. Reid, the Scotch metaphysician, says that this faculty is a talent of the greatest im-

portance to poets and orators, and, I would add, to musicians. If God had not conferred this noble faculty, we never should have had Milton's "Paradise Lost," or Bunyan's "Immortal Dream," or Handel's sublime Oratorios, or Spurgeon's grand flights of eloquence.

7. The will or power of volition is the mental or moral faculty which gives man the power of choice. I do not speak of the will in a theological sense, but in the metaphysical aspect. The will is a simple faculty among the rest of the man's intellectual powers; but volition is the will called into activity. If man were destitute of this power he would be a mere machine, and, therefore, incapable of responsibility or moral excellence. It is the power of will, of freedom of choice that constitutes man a rational and responsible being. Dr. Samuel Clarke, in his great argument for the being and attributes of God, put this thought well in the ninth proposition, thus: "That the self-existent and original cause of all things is not a necessary agent, but a Being endowed with liberty and choice." And, therefore, when the Self-Existent and All-Wise God created man in "His own image.' He endowed him with the mental and moral attributes named above. Man is now a fallen creature, still he has the power of will and freedom left, and thereby reflects in a small measure the liberty and freedom of his Creator.

8. Man has affections and passions forming a part of his mental and moral constitution. Without these endowments he would be incapable of emotion and destitute of feeling. He would be unfit for society, or full enjoyments of life, and the richer feelings of religion. He would doubtless regard good and evil with indifference, which would be a great calamity. The affections and passions are necessary to the development of Christian virtues, but should be regulated by the faculties of reason and judgment and conscience.

9. Conscience is generally designated the moral faculty. By this moral power man is enabled to judge upon the moral quality of actions, and perceive the distinction between good and evil. If man were destitute of this faculty there would be no inward voice calling him to duty, no restraint upon vice, and no stimulant to virtue. Conscience is a moral power needful to the development of our whole spiritual being, and, therefore, God has given it. In our mental faculties we perceive a mutual dependence and relation, which show the wisdom and goodness of our Creator. If the minds of men are endowed with such faculties and powers for the acquirement of knowledge and wisdom, the Great Being who created them must possess the same powers and faculties, only in an infinitely higher degree. If men can think, and reason, and obtain wisdom by the exercise of their

powers, it is logical and reasonable to argue from man up to his Creator, and ascribe power, wisdom and intelligence to God the Creator of man. I would ask, if Sir Isaac Newton never lived who thought out the thoughts in the "Principia?" If Lord Bacon never lived, who thought out the thoughts in the "Novum Organum?" If Jesus Christ never lived, who thought out the "Four Gospels?" If there is no God, who is the author of the sublime thoughts of the Bible? Every rational and reasonable person will see from his own mental constitution that there must be an All-wise God to give him faculties and powers. The reader will find the text for this letter, with its thoughts in the 103rd Psalm, 1 and 2 verses, "Bless the Lord, O my soul; and all that is within me bless His holy name. Bless the Lord, O my soul, and forget not all His benefits.

## LETTER XVI.

# Instincts.

THE object of the last letter was to point out the power, wisdom, and goodness of God in the creation and arrangement of man's mental faculties; but in this, instinct is the subject. Before passing on, however, I may with profit to the reader make a few more remarks on the great powers of the mind. In our intellectual faculties and mental operations we perceive a mutual dependence and relation indicative of Divine wisdom. Between the simple exercise of perception and every intervening power, up to the highest offices of reason and conscience, there is a necessary connection and wise adjustment; fitting the mind to acquire, retain, analyze, arrange, and employ its treasures and intellectual acquirements, for the social and moral happiness of our being. The mind has the power to study its own construction and capacity, arrange its own powers, classify its own thoughts, and investigate the wide world and bring it into subjection to its gigantic capabilities. The remarks of the Archbishop of York at the late Congress in Leicester are noble words, and worthy of a

place in this letter on the point. His Grace said: "The mind will not lay aside its high prerogative of discussing its own origin and its own destiny, with the faculties that God has given it for its own. The field of knowledge will not be circumscribed, and the age that boasts of its science is the most unpromising for such tyrannical limitntions. Lose their hold on the problems of life, death, and eternity, mankind will never. Let us not rail against science; but science asks too much when it reqnires the abnegnation of all other knowledge and belief. The nature of man is against it, the history of our race is against it, the aspirations of the race forbid it." Dr. Thomson is said to be the greatest metaphysician in the Church of England, and truly these wordsare worthy of the serious and solemn consideration of every intelligent person in the land, not excepting Mr. Bradlaugh, M.P. Mr. Bradlaugh defines "intelligence" to be "a mode of existence." He is quite right; the intelligent mind is a mode of existence, but not a mode of material existence, any more than the bird is a part of the cage in which it lives and sings. Mr. Bradlaugh's definition does not go far enough, because think, willing, and reasoning are not the qualities of a gate-post nor a milestone, but a man made in the image of his All-wise Creator. The mind of Bishop Butler, which produced his "Analogy of Religion," a master-piece of reasoning. must be the intelligent result of an Intelligent

First Cause, whom we recognise as God. We are not left to the mental powers of man only as proofs of God's existence, wisdom, and goodness, for his instincts argue the being and perfections of God.

1. The instinct of man prompts him to self-preservation, to close his eyes when the dust is blowing, to throw out his hands if he should fall over a stone. He is instinctively led to provide for his wife and children, and show special care when they are sick or afflicted, without racking his brain with syllogisms in order to create this state of mind. I ask, is this instinctive feeling the result of chance or blind necessity? It is not reason to say so, or even to think so.

2. Look at the loving mother with her child. How fondly she loves it! What unspeakable pleasure she has in pressing it to her bosom? It is not reason or logic which has prompted the mother to care for and love her child, but instinct. She loves at the bidding of the great "Father of Spirits," who bestowed this instinct, as it was so necessary for the welfare of the child and the continuation and preservation of the human race. The Sovereign Creator bestowed on men and women just those faculties, powers, and instincts which were needful to answer the end of their creation.

3. Look next at the new-born babe exercising its instinctive knowledge. This little creature knows nothing, has been taught nothing, yet it acts with all

the wisdom of a philosopher. No sooner has it got fairly into the world than it begins to fumble about for something, and continues this operation till it has found that for which it instinctively craves, and when it has found it the greatest scientist in the world could not make better use of it. The rule is, that "practice makes perfect," but here we have perfection without instruction or practice. The child, who never heard a lecture on physiology or the chemistry of its natural food, does its work more thoroughly than the cleverest philosopher could do it; because prompted by the instinct implanted by its All-wise Maker. The same thing is true of the animals, and they set to work as skilfully and suck as cleverly as if they had heard all the lectures of Dr. Huxley and practised the art for ages.

4. Look at the hen—she scratches for her chickens all day long, and will pinch herself to give her little ones plenty. If a shower comes on she spreads her wings as a cover for them, and will sit till she herself is well nigh drowned, quite satisfied if she can keep them dry and warm. And though she has but the heart of a hen, only let the fiercest bull-dog come near, or even the furious bull, she will do her best for their protection, though she should perish in the attempt. No sensible person will say or pretend that reason has kindled the flame of parental love in her breast—reasoning is not in her line; and if it

were, what reason could she assign for her love? She could not say, "My chickens have laid me under great obligations, for they were only hatched a few days back." Nor can she say, "They will pay me back for my care in after life," for as soon as they are able to do for themselves they will leave her and think no more of her, poor creature. Yet there is a reason for her love and strong attachment to her little ones, though it is hidden from her. If hens did not thus love and protect their chickens no chickens would be reared, and if no chickens no hens, and if no hens no eggs, and all the race of hens would perish. How much we are indebted to the goodness of God for instinct and the blessings which flow from it! Mr. Bradlaugh, M.P., and his sceptical brethren would have no eggs for breakfast or fowl for dinner, and yet they deny God, Whose Wisdom supplies their needs.

5. Think again of this subject, as the more we think the more we shall perceive the wisdom and goodness of God in the bestowal of instinct. Take, for example, one of those chickens named above, as she leaves her mother and has become a hen. She has never seen an egg, and when she does see one, she neither knows what it is nor what it is for; yet she acts as if she knew as much about eggs as any farmer's wife in Aylesbury Vale or the greatest philosopher in London. She lays the proper number

in the proper place, then sits on them the proper length of time, applying exactly the right amount of warmth, and thus succeeds in turning them into chickens. The moment the chickens begin to chirp she is full of affection and anxiety, as her own mother had been before. She speaks a new language for the little ones, and the little strangers another for her, and both, without either teachers, grammars, or spelling books, understand each other. Go down a step or two lower in the scale of being, to the insect tribes, and we shall find the same transcendant skill and wisdom. There are two or three hundred thousand species of insects, and each must have its own peculiar food on which to rear its young, and each selects the proper kind, and makes no mistakes. The wide world is full of such wonders, and the more we study them, the more is the wisdom of God unfolded. All this is easy enough to understand, if we suppose the universe to be the product of an All-wise Deity, and governed by His providence. On the supposition that an All-wise God inspires those untaught creatures, giving them the benefit of His infinite understanding and Almighty power, all is plain; but on any other supposition all is as dark as eternal night.

6. Let us turn again to man, and examine some of his instinctive and involuntary tendencies. The principal actions of our physical systems—the actions on which our life and welfare especially depend—are

involuntary and instinctive. They are performed with much wisdom; but the wisdom is not our own. Nor is it the wisdom of our ancestors. It is the pure impulse and instinct of God, in Whom we live, and move, and have our being. The heart, which lies imbedded in man's bosom, beats incessantly, driving the venuous blood through the lungs for purification, then driving the purified blood through the arteries and through every part of the body. By day and night this great central organ does its work, beating four thousand two hundred times in an hour. If man had to wind up his heart every night, as he does his watch, in order to ensure life while he slept, at some time he might forget it; then he would die in his sleep. But the important and necessary work of the heart is not left to man, but is the instinctive and involuntary work of God. Every time the heart beats it seems to look up to heaven for permission to beat again. Take next the lungs, as their work is as important as that of the heart. The heart would cease its action if the lungs should cease to play, and the lungs would cease their action if the air were not continued to us by God. We seem, while waking, to have some power over the action of the heart and lungs; but what is the case during sleep? They work as well and as steadily by night as by day. This is the case, even with Mr. Bradlaugh, and God is the great and good Author of these actions, which are

entirely involuntary on man's part. Take, next, the involuntary operation of sleep. Without this "sweet restorer of tired nature" man would soon perish. Yet sleep comes and goes almost wholly independent of our will. No person can tell the exact moment he went to sleep, any hour of his life, as the very act of recording it would prevent its advent. What admirable wisdom of Providence appears in all the circumstances of the simple act of going to sleep. The wondrous processes of digestion, of assimilation, of deposition, and absorption are involuntary, but necessary, actions, which are performed by night as well as by day. The various elements of food are conveyed to the places where they are needed, and appropriated to their respective uses, in order to keep the body alive and well. Who superintends the digestion, the distribution, and appropriation of these elements? The wisdom of all the philosophers on the earth is not equal to the task. Yet the work goes on, and is done wisely and well. The presence of the great and All-wise within us, working all things according to the counsels of His infinite wisdom and eternal purpose and love, alone will account for the works named above. Every organ of our bodies, every faculty of our mind, every instinct of our nature, and every relation of those organs, faculties, and instincts, and the wonderful adaptation of the whole to the ends of being, recall

and demonstrate the presence, the power, the wisdom, and goodness of our Almighty Creator and All-wise Preserver, as all our faculties, powers, organs, and instincts and light of every kind come from God. The reader will find the text for this letter in James i. 17: "Every good gift and every perfect gift is from above, and cometh down from the Father of lights, with whom is no variableness, neither shadow of turning."

## LETTER XVII.

# Is Man a Developed Monkey?

DR. LATHAM, an eminent ethnologist, says that ethnology is "the science which treats of the history, antiquity, variety, dignity, and futurity of mankind." Now, it is very clear that I cannot enter fully into all these subjects in one letter, and, therefore, must condense my ideas; yet I shall try to give the reader some correct notion of the vastness of the subject, and show the wisdom and goodness of God in the creation of man.

1. The study of man is a great study, and man a great subject of study. Dr. Carlisle says "that man, next to the Deity Himself, is the noblest object of contemplation within the scope of our faculties." Pope, the English poet, has said, "An honest man is the noblest work of God." I would improve upon Pope, and say that "A righteous man is the noblest work of God," and that will include his honesty. The wise men of Greece thought they could hand down to their children nothing better than the well-known motto, "Know thyself!" Hence it is written in capitals on the splendid Temple of Delphos.

To confirm the statement that man is an important study let me name a few of the works which have been written by scientists on this subject. Professor Oken, a Swiss scientist, published his work with the title "Elements of Physio-Philosophy" early in this century. Dr. Pritchard, an English ethnologist, published in 1813 his great work on "The Physical History of Mankind. Dr. Latham, of Cambridge, has laboured with distinguished success in ethnological studies, and written a fine work on the "Varieties of Mankind." Sir John Lubbock, M.P., has produced a work on this subject, entitled "The Antiquities of Man." The Duke of Argyll has also entered into ethnological studies, and produced his book "Primeval man." Dr. Darwin has written several works on the subject, two of which shall be named "Origin of Species" and "Descent of Man." Professor Huxley has written a work called "Man's Place in Nature." This last-named work should have been entitled, according to its contents, "Man among the Monkeys." Sir C. Lyell produced a book bearing the same title as that of Sir John Lubbock, in which he advocates the views of Dr. Darwin. Man must be a great and important study when such men as the above spend so much time and talent in writing books about him. The study of man has many branches, and is in harmony with all the lessons of true science. The study of man respecting his creation is called "Cos-

mogony;" in relation to the functions of life it is called "Physiology;" in relation to the faculties of the mind it is called "Psychology;" in relation to the nature of his being it is called "Ontology;" in relation to the mystery of life it is called "Biology;" in relation to the principle of right and wrong it is called "Moral Philosophy;" in relation to immortality and deity it is called "Theology." If we study man in relation to the varieties of mankind it is called "Ethnology;" if in relation to other animals it is called "Anthropology;" all being cognate branches of one complete science, of which the object and subject equally is man.

2. Next, let us consider the physical origin of man. The cosmogonies of the ancients were very confused, and those of the moderns are very absurd. The Egyptians referred the beginning of all living creatures to spontaneous generation—said man himself was produced from the mud of the Nile. Thomas Carlyle, the Chelsea philosopher, would call this the "Gospel of Mud," as he did the theory of Darwin. The cosmogonies of India and Persia regarded all creation as an inexplicable mystery. Hindoo pantheism considered man as a part of Deity. Hesiod, the oldest of the Greek cosmogonists, repeated the spontaneous generation of Egypt, teaching that the earth sprung from chaos, first produced the sky and the ocean, then giants, then men. Thales, the philosopher, held

that water and air were the principles of all things. Aristotle, the great logician, taught the eternity of matter, which was the essence of stupidity. Plato, the reasoner, conceived the world itself to be a living and divine thing, and that man was the creation of subordinate deities. Lucretius was an atheist, and referred all things to force, nothing to thought, the atoms spread through all space combining into an infinite variety of forms. Briefly speaking, the above are the theories and cosmogonies of the ancients respecting the creation of the world and man.

3. The modern theories and cosmogonies shall next have our consideration. The nineteenth century has been most prolific of theories and cosmogonies, just as monstrous as the ancient, and far more inexcusable, because of the light of modern science, and the full blaze of Bible light. In the beginning of this century, Professor Oken affirmed that the "Primary Mucus," out of which everything organic has been created, was the sea-mucus; the production of this mucus he ascribes to the agency of light, which first made the sea salt, and then vitalised it. Mr. Oken tells us that the earliest organic forms, whether plants or animals, emerged from the shallow parts of the sea, and that man himself was a child of the warm and shallow parts of the sea, and that he was not created, but a developed mucus. Next came Professor Lamarck, a celebrated French naturalist, who

advanced the extravagant supposition of the progressive development of animal functions and the production of new organs by the exertion of the will of the individual. Dr. Darwin's works are essentially the modification and reproduction of the two named above. The anonymous work, entitled "Vestiges of the Natural History of Creation," supported the above theory in a somewhat modified form. Dr. Darwin startled the world by his book on the "Origin and Variation of Species, by means of Natural Selection." This learned author thinks that a Deity, about 300 millions of years back created the spore of a sea-weed, and that apes, and monkeys, and men are to-day developed sea-weed, and man is the latest development of the monkey. The words of Dr. Darwin are these, "The species are not immutable, but have a tendency to change the one to the other." He does not attempt to give a single case or example to prove his theory. If we are to believe Darwin's monkey theory, we may expect the lion to become a lamb literally, the horse a cow, the dog a cat, the ape a schoolmaster, the monkey a Prime Minister, and the gorilla a Lord Chancellor. But I press Dr. Darwin to give a case in which a plant has become an animal, or a fish a bird, or a bird a beast, or has shown the slightest tendency to do so. He has often been asked to do it, and he cannot; and he gets out of it by saying that the geologic periods are not long

enough for such developments. A lame excuse is better than none, doubtless. The Duke of Argyll, who is a thorough geologist and earnest Christian, told Mr. Darwin that he did not think that the honour of his monkey parentage would be universally appreciated. Thirty or forty years ago a common-sense Yorkshire stonemason went to hear the Darwinites discuss the subject, and at the close expressed his opinion thus:—"I believe that these philosophers did come from monkeys as they argue, and that they are fast going back whence they came." Professor Huxley's work called "Man's place in Nature" is no better than Darwin's theory; in fact it is monkeyism. In the said work Dr. Huxley endeavours to trace the transitions in structure from the lowest monkey up to man. He says that "an adult gorilla is about equal in intelligence to a European child two years old. According to this great scientist, these gorillas some day must be Prime Ministers in some of the European Councils, or Barristers in some Law Courts. Dr. Huxley differs from Dr. Darwin, as he does not trace man's origin to the spore of a sea-weed, but to something he calls "protoplasm." Drs. Prichard and Latham and the Duke of Argyll are truly orthodox, but all the rest named are heterodox. But enough of such nonsense. Let us pass away from such conflicting theories and absurdities to the Bible, where we have the only true,

reliable, and common-sense theory of creation. This is like passing from folly to wisdom, from error to truth, from midnight darkness to noon-day light. Let the reader remember that the Book of Genesis is hundreds of years older than any other reliable book in the world—as in sublimity so in antiquity, Genesis has no compeer. Manetho and Berosus, Confucius and Herodotus were posterior to Moses by more than 1000 years, and, therefore, Moses is the true "father of history," and not Herodotus, as ignorantly asserted by the Greeks and foolishly assumed by sceptical historians and philosophers. I would not have spent so much of this letter with the endless speculations of the ancients, and the insufferable twaddle of the moderns, only that it gives us a better appreciation of the Biblical account of the creation of the world and man.

4. Turn we now to this ancient and inspired Book, where we have Heaven's account of the creation. In Genesis we read that "God created man in his own image, in the image of God created he him; male and female created He them." Let us now contrast the teachings of the Holy Bible with the absurd theories before us; then we shall see on which side lie reason, truth, and common sense.

*a.* The Holy Bible informs us that the Lord God made man by a distinct and special act of creation. The *new and old theories* affirm that man was not

created, but produced from sea-weeds, and developed from inferior animals. Which do the ladies and gentlemen of England prefer?

*b.* The Holy Bible represents the first man as an intelligent and dignified creature, endowed with reason and understanding and the gift of speech, which he used on the first day of his creation. The theories of the sceptical scientists assert that the first man was an ignorant and miserable savage, hardly worthy to be called a human being. Is not this a plain contradiction?

*c.* The book of Genesis declares, with special emphasis, that the first man was made in the "image and likeness of God." The theories advanced by Drs. Darwin and Huxley and others assert that the first man was made or produced in the image and likeness of the ape, the gorilla, or the orang-outang. I would ask each of my readers the question, where is your father? Is he in heaven or in monkey-land? I wonder if ever those gentlemen named above go to the Zoological Gardens to see their poor relations?

*d.* King David, in the 8th Psalm, declares that God made man only "a little lower than the angels, and crowned him with glory and honour." The evolutionists and sceptical theorists teach that the first man was only a little higher than a beast. Surely, in all Christian charity, we ought to pity the follies of poor old men, not to say learned simpletons!

generations of the ape, or monkey, or gorilla; and thus, while it denies the truth of the Bible, it blasphemes the holy nature of our Lord Jesus Christ, by tracing it to an apish and beastly origin. I ask, with all reverence, if those scientists should ever get to Heaven by the sovereign grace and infinite mercy of God, how will they dare look the Blessed Saviour in the face? If the development and protoplasm theories be true, then the Bible account of man's origin is untrue; but if the Scriptural account be true, the other theories are not true. Who is willing to receive Dr. Darwin's "Gospel of Mud" instead of the glorious Gospel of the Blessed God? Protoplasm is Huxley's "Gospel of Gas." Who can believe it? Atheism is Bradlaugh's gospel of negations and darkness. Who is willing to trust his immortal soul to this? Many of the above men are philosophers, but they demand too much when they want us to receive their theories as scientific facts. Science is the systematic arrangement of well ascertained facts, but the statements of those theorists are not facts, but opinions, and that without the shadow of a shade of a ghost of scientific evidence to prove them. Sober-minded men and women are not going to swallow opinions and theories when they rest on nothing but conjectures without proof. The Bible is the infallible word of God, and it must be true, if all men *are liars;* and our duty is to prove all things and hold

fast that which is good. The text of this letter will be found in the 8th Psalm, 4th, 5th, and 6th verses: "What is man that thou art mindful of him? and the Son of man that Thou visitest him? For Thou hast made him a little lower than the angels, and hast crowned him with glory and honour. Thou madest him to have dominion over the works of Thy hands; thou hast put all things under his feet."

## LETTER XVIII.

# A New Theory.

IN my last letter my readers were made acquainted with the speculations of Professor Oken, Professor Huxley, and Dr. Darwin. But Professor Charles Deesy has just insulted our common sense by giving us another foolish theory. In order that my readers may have the exact account I enclose an extract from the *Daily Telegraph*:—

"What is man? Lights of science are not altogether unanimous in defining his origin and tracing his descent. Some opine that his ancestors were apes of comparatively recent date; others make him out to have developed to what he is from a pre-historic lump of marine jelly. In this uncertain state of affairs, it is indeed satisfactory to have every doubt cleared up, for good and all, by Professor Charles Deesy, of Fuenfkirchen, who is in a position to assure the world at large that men are derived from frogs, and will at some future period return to their original batrachian condition. 'At the beginning of all terrestrial things,' says the learned Professor, 'a frog-like mammal ruled the waves. It could live in the air as well as in the water, but preferred the latter as a regular and permanent place of residence. This froggy beast is now-

a-days called man. He cannot even now get on without salt, to the consumption of which he became accustomed when he was a simple frog; and the divisions between his fingers and toes, formerly filled up by the swimming apparatus his ancestors have retained, cannot but carry conviction to every unprejudiced mind. Nothing is more absurd than to suppose that man is descended from monkeys. Just the contrary is the case. The modern monkey is a broken-down degenerate man, and it may be doubted that he has it in him to become a frog, in the fulness of time, as will his robuster human ancestor, when the moon and earth shall come into contact. Then universal submersion will accrue, and the frog-man-frog will become the heir to all the ages, to the full results of Time.' It would be difficult to overrate the value or importance of this scientific information."

Surely after getting the above important information the farmers of Aylesbury Vale will be more careful in their treatment of the poor frogs, as children ought to be kind to their ancestors. I should like now to set over against the above-mentioned speculations the letter of Thomas Carlyle, well known as "The Chelsea Philosopher," of world-wide fame. This letter went the round of the public papers in 1877, and is only introduced here as a fitting answer to all the degrading theories of the scientists aforesaid. Carlyle says:—

"A good sort of man is this Darwin, and well meaning, but with very little intellect. Ah, it's a sad and terrible thing to see nigh a whole generation of men and women, professing to be cultivated, looking round

in a purblind fashion, and finding no God in this universe. I suppose it is a reaction from the reign of cant and hollow pretence, professing to believe what in fact they do not believe. And this is what we have come to. All things from frog spawn; the gospel of dirt, the order of the day. The older I grow—and I now stand upon the brink of eternity—the more comes back to me the sentence in the Catechism which I learned when a child, and the fuller and deeper its meaning becomes—'What is the chief end of man? To glorify God and enjoy him for ever.' No gospel of dirt, teaching that men have descended from frogs through monkeys, can ever set that aside."

Every intelligent person who may read this letter of the great philosopher's will at once admit its force, and many will consider it a complete answer to the rubbish of Huxley, Darwin, and Deesy. A few years ago the Right Honourable W. E. Gladstone made a speech at a college in Liverpool, which contained a sentence worth its weight in gold, considered in the light of reply to the scientists of the day. The said speech of the Prime Minister was rich, racy, and rare, as well as classical, philosophic, and scientific. Here are his words on the point. "Upon the ground of what is termed evolution, God is relieved of the labour of creation; and, in the name of unchangeable laws, He is discharged from governing the world." This one sentence from the speech of the right hon. gentleman shows most clearly the folly of agnosticism and secularism, and justifies faith in the all-wise God

of the Bible. The minds of Englishmen are fully bent to the study of three great systems just now, viz., "Agnosticism, Secularism, and Christianity." I will try to formulate in my next letter the creeds or catechisms of the three systems named above, so that my readers may form their own judgments respecting them and accept the one which commends itself to their reason and common sense.

The text which I would name for the consideration of those scientists is in Romans i., 22.: "Professing themselves to be wise, they became fools." What was true of the wiseacres in Paul's day is true now.

## LETTER XIX.

# The Three Creeds.

I WILL now try to set before my readers the creeds and catechisms of Agnosticism, Secularism, and Christianity. I do not undertake to define "Agnosticism," as its teachers and disciples define it by the negative phrase, "I don't know;" which phrase is a synonym for ignorance, and I am not wise enough to formulate a creed on that subject. But, as far as I can learn from the writers on the subject, Agnostics are people who do not on the one hand believe in, nor on the other hand deny, the existence of an independent Creator. Mr. H. Spencer and Mr. Fiske are the great apostles of this creed, which has been formulated thus:—

"I believe in the chaotic Nebula, self-existent Evolver of Heaven and earth, and in the differentiation of its original homogeneous Mass, its first-begotten Product which was self-formed into separate worlds; divided into land and water; self-organised into plants and animals; reproduced in like species; further developed into higher orders; and finally refined, rationalised, and perfected in Man. He descended from the Monkey, ascended to the Philosopher, and sitteth down in the rites and customs of Civilisation, under the laws of a developing Sociology.

From thence he shall come again, by the disintegration of the culminated Heterogeneousness, back to the original Homogeneousness of Chaos. I believe in the wholly impersonal Absolute, the wholly un-Catholic Church, the disunion of the Saints, the survival of the Fittest, the Persistence of Force, the Dispersion of the Body, and in Death Everlasting.—Amen."

It has been asserted by public men that the most dangerous form of scepticism is this Agnosticism. I fully believe the statement, because Agnosticism is a willing and wilful ignorance of God when all nature is bursting with evidences of the existence, wisdom, power, and goodness of the Almighty Creator.

Secularism is Atheism, as acknowledged by Messrs. Holyoake and Bradlaugh. The late Mr. Charles Southwell defined modern Atheism as the "Absence of an idea," and this definition is accepted by Mr. Bradlaugh, M.P., and the lesser lights of the dark creed. They declare that they do not deny the existence of God, because they have no idea on the subject, and could not deny what they have no conception of. This is the modern subterfuge of Atheism, which, like Agnosticism, is a willing and wilful ignorance of God. Let us hear their Catechism :—

Q. What is your name?

A. Secularist.

Q. Who gave you that name?

A. My Monkey-fathers and Frog-mothers in my scepticism, wherein I was made a member of the

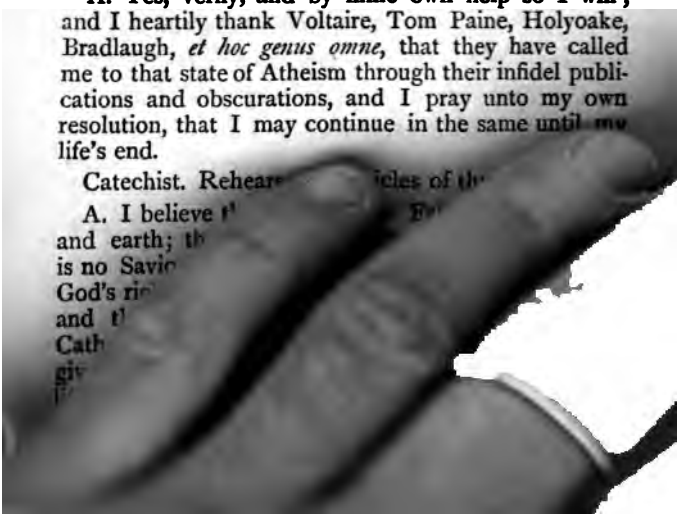
Atheistic Club, an enemy to God and man, and an inheritor of the kingdom of *nothing*.

Q. The name is a misnomer, for Christians are Secularists as well as you, inasmuch as they attend to secular affairs. It should have been *Soli-Secularist*—that is, one who seeks his All in this world alone. But let that pass. What did your Monkey-fathers and Frog-mothers then for you?

A. They did make me promise and vow three things: 1st. That I should renounce Christ and all His works, the hopes and comforts of another and better world, and all the fruits of the Holy Spirit; 2nd. That I should abjure all the articles of the Christian faith; and 3rd. That I should despise God's holy will and commandments, and turn my back on the same all the days of my life.

Q. Do you not think that you are bound to believe, and to do, as you then promised?

A. Yes, verily, and by mine own help so I will; and I heartily thank Voltaire, Tom Paine, Holyoake, Bradlaugh, *et hoc genus omne*, that they have called me to that state of Atheism through their infidel publications and obscurations, and I pray unto my own resolution, that I may continue in the same until my life's end.



A. I believe that the world made itself, and all that in it is; that man sprung up like a mushroom, and will die like a toadstool; that while he lives, Might is Right, and Inclination Law; that Vice and Virtue are fictions, and all men are equally good, let them do what they please.

Catechist. My good child, go your way; only act up to your creed, and you shall live and die, as happy as a dog. Amen."

N.B.—*Per contra.*—"God so loved the world, that He gave His only begotten Son, that whosoever believeth in Him, should not perish, but have everlasting life."

Listen, in the third place, to the creed of the Christian. "I believe in God, the Father Almighty, maker of Heaven and earth. And in Jesus Christ, His only Son, our Lord; who was conceived of the Holy Ghost, born of the Virgin Mary, suffered under Pontius Pilate, was crucified, dead, and buried; He descended into the grave; the third day He rose again from [illegible]d; He ascended into Heaven, and sitteth on [illegible]hand of God, the Father Almighty; from th[illegible]all come to judge the quick and the d[illegible]ve in the Holy Ghost, the Holy [illegible]munion of Saints, the for-[illegible]ction of the body, and [illegible]ed is human in its com-[illegible]bstantial truths, and re-[illegible]at antiquity. Which of [illegible]side reason, truth, and

I ask my intelligent readers to consider these matters, and get their minds settled; for a storm is coming, when those who are not rooted and grounded in the faith will be swept away into the sea of doubt and scepticism. The text for this letter will be found in James i. 5: "If any of you lack wisdom, let him ask of God, that giveth to all men liberally, and upbraideth not, and it shall be given him." Let the Agnostics and Sceptics who have nothing to rest on but "I don't know" attend to the advice of the Apostle James, and their acknowledged ignorance of God will soon give place to Christian knowledge.

## LETTER XX.

# Comparative Anatomy.

EVERY department of Nature abounds with demonstrations of Divine power, skill, wisdom, and benevolence. Whether we study anatomy, or physiology; geology or geography; astronomy or meteorology; biology or ethnology; chemistry or electricity; botany or medicine; history or Scripture—all furnish evidences of the Almighty power, infinite wisdom, excellent skill, and boundless goodness of God, the intelligent Governor of the wide universe. Lord Brougham was one of the greatest men in this or any other country, and he said as much in the following words: "Not a step can we take in the study of science, in any direction, without perceiving the most extraordinary traces of design; and the skill everywhere conspicuous is calculated, in so vast a proportion of instances to promote the happiness of living creatures, and especially of our own kind, that we can feel no hesitation in concluding that if we knew the whole scheme of Providence, every part would be found in harmony with a plan of absolute benevolence." Our fathers attached more

importance to great names than we do, but this man was Lord High Chancellor of England, a great scholar, a profound philosopher, and a humble Christian, and therefore we are glad to have his opinion as to the value of the design argument for the being and perfections of God. If I could collect all the evidences which the sciences named above supply, and present them to the minds of my readers, not only would they be fully satisfied as to the existence of an All-wise God, but feelings of delight and gratitude would fill their hearts, like those of the Psalmist, when he exclaimed, "All Thy works praise Thee, O God, and Thy saints shall bless Thee." The economy of nature is not opposed to the economy of grace, and the Divine sovereignty of Jehovah is as much displayed in philosophy as in Christianity, and, therefore, I am anxious to connect science and religion, and have a text of Scripture for my letters.

The text is found in Psalm cxi. 2 : "The works of the Lord are great, sought out of all them that have pleasure therein." I can say without egotism that I have much pleasure and great delight in searching out the works of the Lord in Nature, Providence, and Grace, and often wonder why all Christians do not delight in searching out the grand works of their great and glorious Creator to the same extent as oneself. The Rev. C. H. Spurgeon, of London, is the man whom British Christians delight to honour, and is also

said to be the most exhaustive expositor of the Psalms in this or any age, and consequently I shall enrich my topic by quoting his words:—"The works of the Lord are great, in design, in size, in number, in excellence. All the works of the Lord are great. Even the little things of God are great. In some point of view or other each one of the productions of His power, or the deeds of His wisdom, will appear to be great to the wise in heart. Those who love their Maker delight in His handiworks; they perceive that there is more in them than appears upon the surface, and, therefore, they bend their minds to study and understand them.' The devout naturalist ransacks nature, the earnest student of history pries into hidden facts and dark stories, and the man of God digs into the mines of Scripture, and hoards up each grain of its golden truth. God's works are worthy of our researches, they yield us instruction and pleasure wonderfully blended, and they grow upon us, appearing to be far greater after investigation than before. Men's works are noble from a distance; God's works are greater when sought out." With these words of the famous preacher and the above from the famous lawyer, and both in favour of such studies as these contained in my letters, I proceed at once to the Animal Kingdom, to search out a few of the works of the Lord. In all probability the most of those who went to the Great Exhibition of the world's

chief productions in 1851 felt confounded and bewildered with the vast multiplicity and endless variety of the wonders and workmanship that met their eyes, and were filled with amazement at the ingenuity of the artists and workmen of the age. This is just our position in the animal kingdom, where we have such vast numbers, with boundless variety. We might safely reckon the number of species of animals of all kinds as amounting to three hundred thousand. They are of all shapes, forms, and sizes, from the animalcules up to the elephant and whale. The more deeply we study them, and search out the works of God in them, the more do the wonders of the planning, designing, and executing mind of the Supreme Being crowd upon us. If we take the most superficial view of the structure of animal bodies, we see common mechanical principles employed in giving them the power of locomotion, and of finding and masticating their food, which could only proceed from the wisdom of an intelligent and contriving Creator. The eyes, ears, legs, wings, fins, claws, and teeth of various tribes of animals are wonderful specimens of mechanical skill, which infinitely excel all the works of men in London, Paris, Berlin, or any other place. But when we look deeper, and consider how the food is assimilated, so as to form and sustain the various parts of the body—the bones, muscles skin, hair, scales, feathers; and,

for that purpose, examine the stomach, bowels, heart, lungs, veins, arteries, and nerves of the animal, we find ourselves in the midst of a system of mechanics and comparative anatomy and physiology truly wonderful. When we look into and examine the food of animals, viz., the vegetable kingdom, on which most of the animal kindgom depends for food, we behold a beautiful assimilation by which the vegetable substances are converted into a great variety of animal life. For example, look at several different animals feeding in one field—a cow, a horse, a deer, a sheep, a swine, and all of them eating grass. In one case the grass becomes horns and beef, in another hoof and horseflesh, in another horns and venison, in another mutton and wool, in another grass is turned into bacon and ham. Even man has the power to convert the fruits of the orchard, the vegetables of the garden, the contents of the bakers' and butchers' shops into bone, brain, muscle, and nerve. Can the scientists tell us by what process in human chemistry man can actually turn bread and cheese, beef and mutton, pears, plums, peaches, sage, rue, cabbages, cauliflowers, grapes, onions, and cucumbers, into all parts of the human system? Can the learned physicians of New York inform us by what means the forty days' faster in Clavenden Hall turned peaches, water melons, milk, and beef-steaks, into a living Dr. Tanner? Can the great scientists, Drs. Ramsey, Huxley, Tyndall,

Jenner, and Darwin, tell us by what kind of animal chemistry cows, deer, sheep, and swine can actually change hay, straw, barley, oats, and grass into beef, venison, mutton, and bacon? Here is the scientific answer. Each creature has the constitutional power to assimilate the various substances to its own nature and use. I accept the explanation as correct, and point out to the sceptical scientists the wonderful contrivance and benevolent adaption by which men and animals can thus assimilate the various substances of nature to themselves for support and pleasure. I am at a loss to know how such men as Darwin, Huxley, and Bradlaugh can study such subjects without seeing the manifold proofs of design, wisdom, and goodness in them. The fitness of the different animals, their physical construction, and circumstances in which they are found, present an endless subject of curious inquiry and instructive contemplation.

1. For example—The camel, which lives in sandy deserts, has broad-spreading hoofs to support him on the loose soil, and an apparatus in his body by which water is kept for many days, to be used when no moisture can be had. The stomach of this great animal is well known to contain large quantities of water, which it retains fresh for a considerable length of time. This provision would be useless in the neighbourhood of wells and streams; therefore it is a wise contrivance for the good of the animal

while crossing the desert where no water is. Again, the food of the desert, hard and scanty as it is, fails the camel at times; and then its hump, which strikes the eye as a deformity, becomes of great use. Its fatty mass is gradually absorbed into the system, which thus receives the nutriment denied in the desert. When the Arab is about to start on a journey over the desert, the first thing about which he is anxious is the bag and hump of his camel. Again, there is a singular and beautiful provision made in this animal's foot, for enabling it to sustain the fatigue of journeys under the pressure of its great weight. Besides the yielding of the bones and ligaments, which gives elasticity to the foot of the deer and other animals, there is in the camel's foot, between the horny sole and the bones, a cushion, like a ball, of soft matter, almost fluid, but in which there is a mass of threads extremely elastic, interwoven with the pulpy substance. The cushion thus easily changes its shape when pressed, yet it has such an elastic spring that the bones of the foot press on it uninjured by the heavy body which they support, and this huge animal steps along as softly as a cat.

2. Turn we now to a well-known domestic animal at home—viz., the horse. The skilful structure of the limbs of this fine creature displays kindness to the horse and mercy to mankind. The bones of the foot are not placed directly under the weight of the

animal; if they were in an upright position they would make a firm pillar, and every motion would cause a shock and great pain. They are placed slanting, and tied together, so as to form springs as exact as those which we make of leather and steel for carriages. Again—Some years ago a learned president of the Royal Veterinary College discovered that the eye of the horse possessed a magnifying power, by which man appears to it three or four times his natural size. This is a wise provision, for if that very spirited animal did not look on man as greatly his superior in size, he would never submit so quietly. I should think that every intelligent school-boy could see the proofs of design, contrivance, and goodness in the above cases, and the many which have been given before. Let me close this letter by putting the argument in brief form, thus: Fitness implies design, and some end for which it is fitted—and the perception and choice of fit means to accomplish the end show wisdom and power. The evidence or proof for the existence of a Supreme intelligence is short and simple. There are but three suppositions. Whatever comes to pass or happens must happen either by chance, or necessity, or by design. It is certain that these three conditions exhaust all possibilities. Chance is the first refuge of ignorance, and necessity the second. Every event has a cause, and when the mind ascribes any event to chance, it merely pleads

its ignorance of the cause. The plea of necessity is but a more learned ignorance. Necessity is not a cause, but an effect; not a power, but the want of it, and therefore cannot be the cause of any effect. So, then, the wide world is an effect, and God the All-wise and Almighty Designer and Creator, to whom be all the praise and glory.

## LETTER XXI.

# Comparative Anatomy.

*(Continued.)*

THE camel and horse were the only creatures specified in my last letter; but in this I hope to give more examples to furnish evidences of the existence of an All-wise God.

1. Take, for example, the reindeer, which inhabits a country covered with snow the greater part of the year. Mark how admirably its hoof is formed for going over that cold and light substance, without sinking into it or being frozen by it! The under-side is covered entirely with hair of a warm and close texture; and the hoof, altogether, is very broad, acting exactly like the snow-shoes which men have made for giving them a larger space to stand on than their feet, and thus avoid sinking. Furthermore, the deer spreads the hoof as wide as possible when it touches the ground; but, as this breadth would be inconvenient in the air, by giving a greater resistance while he is moving along, no sooner does he lift the hoof than the two parts into which it is cloven fall together, and so lessen the surface exposed to the air. The structure of the hoof is also well and wisely adapted to

scrape away the snow, and enable the animal to get at the particular kind of moss on which he feeds. Moreover, this plant, unlike others, is in its full growth during the winter season, and this animal thrives at the very time when of greatest use to man. This creature is of the greatest service to the Laplander, who can dispense with the services of horses, sheep, and oxen, as it will carry him in his sledge over the snow thirty, forty, or fifty miles a day. Its milk provides him with cheese, its flesh supplies him with food, and its skin furnishes him, not only with clothing, but with tents and bedding. What wisdom my readers can or should behold in the construction of this animal, and what goodness to the people of Finland and Lapland, and elsewhere, in supplying them with such useful creatures! Surely, no infidel would be so foolish as to say that the reindeer made itself, and selected the Arctic circle in which to live. No, the Sovereign Creator made this Lapland buck, and fixed his place of abode; and in him, with all his circumstances, I see the wisdom and goodness of the Supreme Being.

2. The beaver is a wonderful creature, and has all the capabilities of architect, builder, and navigator. The sagacity and industry of the beaver have been the favourite theme of naturalists from the time of Buffon to the present day. North America is the great breeding-place of the beaver

to-day, but at some remote period it lived in this country, and no doubt Beverley, in Yorkshire, took its name from the fact of the beavers living in the river Hull. These animals, as if to enable them to live and move either on land or in water, have two web-feet, like those of ducks or water-dogs, and two like those of land animals. When they wish to construct a dwelling-place, or rather a city, for it serves the whole flock, they choose a level ground with a stream running through it; they then dam up the stream so as to make a pond, and they perform the operation as well and as skilfully as we could ourselves. Next they drive into the ground stakes of five or six feet long in rows, walling each row with twigs, and puddling it with clay, which they ram close in, so as to make the whole solid and water-tight. This dam is likewise shaped on the true principles of the building art, for the upper side next the water slopes, and the side below is perpendicular; the base of the dam is ten or twelve feet thick, the top or narrow part two or three, and it is sometimes as long as one hundred feet. The pond being thus formed and secured, they make their houses round the edge of it. These houses are cells with vaulted roofs and upon piles, and are made of stones, earth, and sticks. The walls are two feet thick, and plastered as neatly as if the trowel had been used. Sometimes they have two or three stories for retreating to in

case of floods, and they always have two doors, one towards the water and the other towards the land. They keep their winter provisions in stores, and bring them to use; they make their beds of moss, they live on the bark of trees, gum, and crawfish. In working they all bear their share; some gnaw the trees and branches with their teeth to form stakes and beams; others roll the pieces to the water; others, diving, make holes with their teeth to place the piles in; others collect and carry stones and clay; others beat and mix the mortar; and others carry it on their broad tails, and with these beat it and plaster it. Some act as foremen and superintend the rest, and make signals by sharp strokes with the tails, which are carefully attended to; the beavers hastening to the place where they are wanted to work, or to repair any hole made by the water, or to defend themselves, or to make their escape when attacked by an enemy. When we reflect on the instincts which lead the beavers to work, and build, and provide for their natural wants and protection with the sagacity of men, we may find in that alone a just subject of admiration of, and praise to, the All-wise Creator. Surely, gentlemen who wear beaver-hats, and the ladies who are about to wear beaver felts, will be thankful to God who created the beaver to supply such garments for them.

3. The duck will no doubt be an interesting subject

to my readers ; but if I were to give a full description of the duck's anatomy and physiology, it would occupy too much space ; I shall, therefore, content myself with a few of the most important marks of design. The foot of the duck is so formed, and the tendons so arranged, that it spreads out into the greatest extent possible, folds up into the smallest size possible, just as the requirements of the creature when swimming render needful. All the ingenuity of the present day exerted by ship-builders to improve our steam-boats makes nothing to approach the web-foot of a duck, which is an inimitable paddle. The duck which feeds in muddy places has a particular form of bill ; it is made so as to act like a strainer, separating the finer from the grosser parts of the liquid in ditches and horse-ponds. The bill of the duck is furnished with nerves nearer the point than in birds which feed on substances more exposed to the light ; so that being more sensitive, it serves better for the duck to grope in the dark stream for food. Were it not for this wise arrangement in the duck's bill, the people who indulge freely in Aylesbury ducks for dinner would soon eat their peck of dirt ; and, therefore, every duck dinner should call for extra gratitude to God. The interior of the duck's egg consists of three parts, the duckling, the yolk in which the duckling is placed, and the white in which the yolk swims. These three substances are so formed and so wisely arranged, that

the duckling is always uppermost, roll the egg how you will. The consequence is, the duckling is always kept nearest to the warm body of the mother while she is sitting, and thus is enabled to obtain the amount of heat needful to its development. Let the people of Aylesbury's "Famous Vale," who get their bread by breeding ducks, adore God the Creator for this wise contrivance, for if it were otherwise many of their eggs would be spoiled.

4. Next, take an example from ornithology, the science of birds. Birds are supported by two legs, and are furnished with two wings and two ears; but have no auricles or external ears, as they would impede their flight. Their bodies are covered with feathers, which are much lighter than air, and lie over each other like the tiles of a house, to keep them dry; for the sake of warmth, a soft down fills up the vacant spaces between the shafts of the feathers; the bones are hollow, and on that account light, and their shape is such as is best fitted to make their way through the air. The feathers of the wings of birds are found to be placed at the best possible angle for helping on the bird by their action on the air. Suppose a bird to be at a great height, and wishful to descend to a point some distance below it, the line in which it can go the quickest of all will be what is called *cycloid*; and so far as can be ascertained by the greatest scientists, this is the line in which eagles and similar birds that

build in the rocks drop down from height to height. No other animals have any communication between the air vessels of their lungs and the hollow parts of their bodies; but birds have. By these means they can blow out their bodies, as we do a bladder, and thus become lighter, when they would soar higher, and close them to drop lower or escape a pursuer. What was said of the duck's egg is true of the hen's and all birds which hatch their young. The more we study the construction and habits of birds, the greater will be our admiration of the wisdom and goodness of God, who made them to answer a wise purpose; and also to please us with their cheerful notes, and delight us with their songs.

5. Turn we now to ichthyology, the science of fishes, to get another example of design in the works of the All-wise and Supreme Being. The inhabitants of the water, as well as the inhabitants of the air, show the power and wisdom of their Maker, though they do not fall within the compass of our observation as much as birds. The form of fishes is wisely adapted to the element in which they live. Their form is in general wedge-shaded at either end, and swelling in the middle, by which they are enabled to cut through the water with the greatest ease. Fishes have a flexibility in the back-bone, yea in the whole body, inimitable by art, which most of all helps their velocity. Their fins, which serve to balance them, to urge

them forward, to direct them in their course, and the tail which acts as a rudder to keep them in the right path of the sea, are wonderful contrivances. Every fin as well as every feather is a mechanical wonder, and shows the great wisdom of its Divine Author. Fishes have air-bladders in their bodies, and can puff them out, or press them closer, at their pleasure. So when they want to rise in the water, they fill out the bladder, and this lightens them; when they wish to sink, they squeeze the bladder, and this makes them heavier. Which shall we most admire in all this, the power and wisdom of our Sovereign Creator in the formation and preservation of these animals, or the goodness of God in giving them for our food? How many nutritive dishes we should be deprived of, if those extensive plains of water, on which neither trees nor fruit grow, were not peopled with creatures as prolific as they are delicious, and which amply supply our needs! When we think of the many millions of herrings and other fishes which are caught annually, we may be surprised that any should remain. But the multiplication of fishes is prodigious, as they are the most prolific of all animals. It has been found, for instance, that the pike lays 300,000 eggs; the carp above 200,000, and the mackerel near a half a million, so that our Heavenly Father is constantly supplying our needs both from sea and land. Time would fail me to tell of the wisdom of God as seen in the con-

struction and habits of the various creatures of the whole of the animal kingdom; but enough has been said to show the marks of design in this department of God's works.

I will now supply the reader with the text for this letter. He will find it in the 104th Psalm and at the 24th verse, which reads thus — "O Lord, how manifold are thy works! in wisdom hast thou made them all: the earth is full of thy riches." I would request the reader to study that whole Psalm, and as an inducement, let me recite the words of Baron Humboldt as to its character:—"This Psalm presents a picture of the entire Cosmos, or World, and I am astonished to see, within the compass of a poem of such small dimensions, the universe, the heavens, and the earth, drawn with a few grand strokes." The German philosopher might be astonished, but I am not, as I remember that each stroke was given by the pen of inspiration and guided by the hand of infinite wisdom.

## LETTER XXII.

# The Vegetable Kingdom.

NATURAL philosophers generally divide the wide field of nature into three parts, viz., the animal, vegetable, and mineral kingdoms. Infidels acknowledge the correctness of this classification, and use the term "kingdom" in their lectures, and yet deny the existence of the Almighty King who reigns in these kingdoms. Every person of common capacity knows right well that a principality implies a prince, a kingdom implies a king, a law implies a lawgiver, and, therefore, when Mr. Bradlaugh, M.P., and his disciples talk of a kingdom without a king, they utter rank nonsense.

The science of botany in its widest sense includes the vegetable kingdom, as it comprehends all that is known of plants, flowers, and trees, and therefore forms a boundless field of inquiry. There have already been discovered more than 56,000 species of plants, specimens of all which may be seen in the museums of natural history at London and Paris. In a word, the whole earth is covered with vegetable life in such rich profusion and vast variety, that to attempt

the stone to open, the seed to germinate, and the embryo tree to grow. More perfect designs and wiser contrivances are absolutely inconceivable. Could Mr. Bradlaugh make a plum? Could the sceptical farmer who said that the dung cart was the chief cause of the good harvest, make a grain of wheat? Can the scientific agriculturist explain this matter, without taking into account the All-wise God and All-gracious Providence? There is no contriving power in the tree itself on which the seed is produced, nor in the soil in which it grows, nor in the rain or dew, nor in the sunshine. All these things help to bring the fruits to maturity, but have no intelligence or skill or power to contrive the plum, or any of the fruits of the earth. Where is the contrivance? There is but one answer—viz., it is the work of an All-perfect and Almighty God, who provides for the temporal needs of His creatures.

3. Take next the arrangements of Divine Providence for the dispersion of seeds, the preservation of the various races of plants and trees, and their dissemination over the surface of the world. If the seeds of plants were to fall down in heaps at the feet of the stems on which they grow, they would, when they germinated, choke each other, and few, if any, would come to perfection. The result would be the probable destruction of the various races of plants. There are some plants which, when left to themselves, do thus shed their

seeds at the feet of the stems on which they grow, and consequently perish. This is the case with the wheat plant, the oat plant, the rye plant, with peas and beans, and many more. But the safe preservation of these kinds of plants is necessary to man's comfort and welfare, and, therefore, he attends to their seeds, gathers them when ripe, and makes use of them for food and seed to sow again. God having made the seeds and plants, and also made it the interest of man to attend to these seeds and plants, He makes no further provision for their dissemination, as man will do that. But there are many thousands of plants which are needful to the welfare of the world, and to which man pays no attention. God Himself provides for the dispersion over the earth and their preservation. To the seeds of some of these plants He gives wings, and matters are so arranged that when the seeds are ripe they are loosened from the stem on which they grow, while the wings spread out and bear them to their appointed places. The seeds of other plants are provided with springs, which squirt them out and scatter them broadcast. Some plants are provided with hooks, with which they take hold of men and cattle, and are borne along to their places. I have seen men come out from the plants and shake from their garments the seeds which had made free to take hold of them—never thinking that God was using them at

the time to do a little sowing for Him. In some cases the seed-vessels, bursting, throw the seed a great way off; in others, as in the case of thistles and dandelions, the seeds are carried on by the wind; birds and animals convey seeds to distant places, and so become the sowing servants of the Most High.

4. Take next the germination of seeds. Many seeds will not grow in autumn, they seem to know that it is the wrong time of the year. It is well they will not grow in autumn, as they could not gather strength to resist the frosts of winter, so they would perish. God keeps them wrapped up through the winter in their safe enclosures. What wisdom and goodness we behold in the works of nature in relation to the vegetable kingdom! When I speak of nature, I mean God, working in and behind nature. In the first number of the *Modern Review*, there is an article "On Force behind Nature," by Dr. W. B. Carpenter, C.B., M.D., F.R.S., one of the leading scientists of the day. His words are weighty, and well worth quoting in this letter:—

"I deem it just as absurd and illogical to affirm that there is no place for a God in nature, originating, directing, and controlling its forces by His will, as it would be to assert that there is no place in man's body for his conscious mind."

This is well and wisely said by Dr. Carpenter, who is equal to Professor Huxley as a physiologist and

scientist. Dr. Carpenter is a believer, and we, like him, can see the manifestations of God's wisdom and goodness in Nature. I can see the goodness of God in the rich profusion of grass, grain, fruits, roots, vegetables, and other kinds of food for man and beast.

The reader will find the text in Gen i. 11, 12: "And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself upon the earth; and it was so. And the earth brought forth grass, and herb yielding fruit after its kind, and the tree yielding fruit whose seed was in itself after its kind, and God saw that it was good." This is the true Source of the vegetable kingdom, to Whom all praise and glory should be given.

## LETTER XXIII.

# The Mineral Kingdom.

THE science of mineralogy is a very extensive one, including as it does the kindred sciences of geology and palæontology. The object of mineralogy is the description and arrangement of minerals, by which we behold the wisdom and goodness of God, the Creator of the earth. All the bodies belonging to our globe, which are neither animal nor vegetable, are mineral, and, therefore, we have to penetrate into the interior recesses of the earth in order to see the wisdom and goodness of God as manifested therein.

The text for this letter will be found in the 24th Psalm and first verse, which reads thus: "The earth is the Lord's, and the fulness thereof; the world, and they that dwell therein." These Divine words are now upon London's Royal Exchange, but they should be written across the sky in capital letters as big as a rainbow, that the tyrant kings, stupid autocrats, and sceptical philosophers and wicked men might learn the name of God, the true Proprietor of the earth. We have seen the wisdom of God in the wonders of

the animal kingdom, the goodness of God in the vegetable kingdom, and now we descend into the bowels of the earth, and behold His goodness in the minerals, metals, and rocks. The innumerable articles of the mineral kingdom are deposited in the bowels of the earth as in a vast magazine, and, if we could take a survey of them as easily as we do the objects of the animal and vegetable kingdoms, we should behold the wisdom and goodness of the Supreme Being in a most striking manner. This mineral kingdom is the workshop of nature, or rather of God, where He has been working for ages, preparing the coal, lead, copper, iron, and gold for the use of mankind.

For the sake of order and clearness, I shall divide the mineral kingdom, or the substances of it, into four classes. First Class.—This class includes earths, those bodies which cannot be dissolved by fire, and which stand the action of it, without losing any of their substance. What wisdom we behold in the Creator of the earth in giving to the various kinds of clay the quality to resist the destructive power of fire! By this wise arrangement we have bricks for building houses, porcelain ornaments, and earthenware utensils for domestic use. To this class belong two kinds of stone, the precious and the common. The common stones are the more useful, and more needed, and therefore we have them supplied in greater abundance for building purposes. The precious stones are nume-

rous, and of considerable variety, but are used more for ornament than anything else. These are diamonds, rubies, chrysolites, jaspers, the topaz and sapphire, and some others; but they all belong to the Lord, "As the earth is His and the fulness thereof." How dependant on the goodness of God are the rich for their ornaments, and for the stones to build themselves houses to cover them from the storm and the cold! The infidel tradesman might make bricks, but not clay; he might build a house, but not make a stone. Let the sceptical followers of Mr. Bradlaugh, M.P., throw away their infidelity, and behold the goodness of God in getting these things ready for their use many hundreds, nay thousands, of years before they were born.

Second Class.—The various salts or saline substances form the second class of the mineral kingdom. These are natural soda, rock salt, nitre, alum, sal-ammoniac, Epsom salts, and carbonate of lime, and many others. How very good it was on God's part to prepare all these medicinal substances for the good of man, in order to heal his diseases! How much medical doctors depend on God's goodness for their *materia medica*, but do not acknowledge it as they should. Think, again, of the mineral waters, which are springs of health and life to thousands in this and other countries. The beautiful city of Bath is the Bethesda of Great Britain, with its hot mineral waters, which are

precious gifts of Divine Providence. I can see the wisdom of God in the very locality of this city, with its warm waters, and situation for the benefit of poor suffering invalids. Bath is beautifully situated in a wooded valley on the banks of the Avon, and is surrounded by lofty hills, which greatly protect the city from easterly winds. It offers great advantages to invalids, for its climate is mild and its waters are health-giving. These famous mineral springs of Bath contain sodium and magnesium, and are the only warm waters which are available for medicinal use in this country. Had these warm springs been on the top of the Chiltern Hills, the cold north and easterly winds would have nullified the good and beneficial effect of the warm waters. I know by experience the value of these waters, and have seen a person who was turned out of London hospitals as incurable perfectly healed and cured by the mineral waters of Bath. These hot springs come up from the mineral kingdom by design and not chance. It is for the good of man that the Lord has caused these warm and health-giving waters to spring out of the earth; therefore, let us praise Him for the inexhaustible riches of Divine goodness.

3. The third class of the mineral kingdom comprehends the inflammable substances, such as sulphur, carbon, bitumen, coal, amber, naphtha, petroleum, and some others. Coal is the most useful of all these

substances, and my remarks will be confined to it, as in its formation and preparation for man's use the goodness of God is very manifest. It is well ascertained by a careful geologic investigation that the seams of coal which are now ready for our use, were all vast forests of ferns and coal plants exposed to the sun in ages past. But by the good providence of God the ferns, forests, moss, and coal-plants were deposited deep down in the earth, fossilized by the operations of nature, and so mercifully prepared by the sovereign goodness of an All-wise God for man's use. I have not attempted to give any description of the various operations in the formation of the coal seams, as that would require the use of geological terms, which I have carefully avoided, as my object is to point out marks of design only. It is certain that the breaking up, overturning, and dislocation of the rocks in the ages past show the goodness of the Lord; for suppose the rocks to have remained in their original position, their useful contents would have been unknown. The coal, rock salt, marble, chalk, granite, and so forth would have been buried far too deep for man to reach. Some thoughtless people enjoy the heat of the fire and the light of the gas without thinking of God who provided these good things for them. A Christian geologist once said that gas was bottled-up sunshine, and I would add the man who discovered the way to make gas

from coal pulled the cork out. Mr. Bradlaugh and his disciples tell us that coal is no proof of God's wisdom and goodness, because it is placed so deep under ground, and men have to work hard and run a risk in order to get it. The answer to that objection lies in this direction :—

1. If the coal had been placed on the surface, it would have covered a large extent of ground which now produces grass, grain, and fruits.

2. If it had been placed on the surface, it would have been much more likely to have taken fire, and have done far more harm, as fire is a bad master.

3. If it had been on the surface, it would long ago have ceased to be coal in the true sense, as all the gas, which is one of its chief qualities, would have escaped.

4. There was no other way, as we can see, or choice, but either to bury the coal deep below the surface of the earth, and press it down with a heavy weight of overlying earth and rocks, or leave us without coal altogether.

5. As to labour being necessary to get the coal, this is true of everything else, and, therefore, no valid objection. Labour is necessary to our welfare, to the development of our mental and physical powers; but explosions are not necessary, and are preventible ninety-nine times out of every hundred.

The late fearful Seaham Colliery explosion in

Durham, which has sent sorrow and sadness to every home and heart in England, is not traceable to an All-wise and perfect God, but to the covetousness and folly and neglect of men. I lived for six years in Durham, and near to the place of the explosion, and have some knowledge of the working of coal pits, and, therefore, I am sure that most of the explosions might be prevented. If the Marquis of Londonderry had spent £500 in making an extra shaft for the escape of foul air and gas, and the officials and men had only exercised common sense, this would not have happened. I believe that every event that comes to pass must do so either by Divine command or Divine permission. It is clear, however, to every reflective and intelligent mind, that God, the Sovereign King of Heaven, suffers what He does not decree, foreknows what He does not foreordain, permits what He does not predestinate, and, therefore, the awful Seaham Colliery explosion was permitted, but not predestinated.

As a teacher of our glorious Christianity, I am not willing to allow men to charge the awful consequences of their own follies on the Providence of God, and excuse the evils of their own neglect by saying God foreordained it. The manner in which coal, rock salt, building stone, marble, and other useful minerals are prepared for the use of man, is a mark of goodness and wisdom.

4. The fourth class of the mineral kingdom contains metals, which are heavier than the other bodies. In studying this part of God's works great care should be taken not to confuse minerals with metals. Stones, gems, coals, sand, sulphur, salt, and so on, are minerals, but not metals. This metallic class includes platina, gold, silver, copper, iron, lead, tin, bismuth, and zinc, with many others. All these bodies are the gifts of God, and given for the use and good of mankind. The things most needful are supplied in greatest abundance. For example, clay, stone, slate, coal, lead, and iron are supplied in endless quantities. Gold, silver, and precious stones may be scarce, but only limited supplies are requisite.

Let the reader of this letter study well the text in all its possible relations and ramifications, and he will readily see how natural philosophy and Scripture agree, and both own one Divine Creator and Master. David, the royal student, says in our text, "The earth is the Lord's, and the fulness thereof." Some one has suggested a new translation, viz.: "The earth is the landlord's and the fulness thereof; the world, and they that dwell therein." But the Duke, or Marquis, or Earl, or Lord of earth is not the true landowner, because the Most High God, the possessor of heaven and earth, is the real proprietor of the earth and the fulness thereof, above, and in the bowels of the earth below. The fee-simple is not with the Duke, or the

Viscount, or the Baron, or the Lord of the Manor, or the Freeholder, but with God the Creator, whose stewards these noblemen and gentlemen are, and to whom they will have to give an account of their stewardship. Whoever may hold the title-deeds of the various parts and parcels of the earth, the text is true in all particulars. The earth is full of animals and plants, the air is full of birds, the sea is full of fishes, and the bowels of the earth are full of metals and minerals, all wisely provided by an all-good and all-perfect God for the use and pleasure of mankind. Blind and stupid must that person be who cannot see proofs of the power, wisdom, and goodness of God in the various works of creation and Providence.

## LETTER XXIV.

# Terrestrial Adaptations.

THE object of this letter is to point out to my readers the marks of design and contrivance in the terrestrial adaptations and cosmological arrangements which we behold in the wide field of Nature. The earth, the sky, and the sea abound with design and contrivance, and marvels calculated to excite attention, astonishment, and profound veneration. Without leaving the narrow limits of the planet on which it has pleased the Sovereign Author of Nature to fix our existence, what varied scenes, what grand and sublime spectacles, are presented to our consideration! The examination of the physical world, with its lofty and snow-clad mountains, whose summits are lost in the clouds; its tremendous cataracts, which are born of the mountains and feed the lakes; the rivers and seas, and all the rest of the wonders of creation, leads most minds to believe in a God. But some amongst us say that they can behold all these things without seeing the marks of design and contrivance in them, and, therefore, I must try to point out a few of such marks to these people.

1. Take the figure of the earth as a proof of infinite wisdom and goodness. Dr. Cornwall, Ph.D., F.R.G.S., tells us, in his famous work on geography, that the earth is round, and he gives the reasons for it, which need not be repeated here. We have all heard of Captain Cook, who sailed round the world, which he could not have done if it had not been of a spherical form. The earth is not perfectly round, or it would be a sphere; but it differs so little from a perfect sphere that it is called an oblate spheroid. The earth turns round once in twenty-four hours, and the line on which the earth appears to turn is called the axis. This form, which the All-wise Creator has given the earth, is the most suitable and convenient to a world like ours and to its inhabitants. By the rotundity and rotation of the earth, light and heat, which are so necessary to the growth and preservation of animals and plants, are distributed to both sides of the globe. If the earth were a level plain, as some people used to think, some countries would be like a paradise, and others a chaos. One part would be overwhelmed by waters, and the other parched up by the heat of the sun. Some countries would be exposed to furious tempests, which would destroy everything, while the inhabitants of other parts would die of suffocation. In the creation and evolution, or arrangement of this world there is a wise adaptation of things to each other, so as to produce and maintain the

balance and perfection of the whole for the good of mankind. What reason can the philosopher give for the roundness and rotation of the earth? None whatever but the sovereign will of the All-wise Creator.

2. Take next the size and operations of the ocean. The area of the sea is about three times as large as that of the land, and its average depth is about three miles. If there were more water, or the basin of the ocean were more shallow, the sea would encroach upon the land; if, on the other hand, there were less water, or the sea-beds were deeper, the quantity of land would be increased. In the former case the sea would inundate our shores, destroy our ports, devastate our fields, and do very much mischief. In the latter case it would change our coast-line, dry up our bays and harbours, render our ports useless, and frustrate much of the skill and works of man. This permission to go so far, and prohibition to go no farther, given by God to the sea, are wonderful proofs of goodness and wisdom on the part of our Heavenly Father. Again, think of the fact that the quantity of water contributed to the ocean by rivers is enough to make a new one every year; and this has now been going on for many thousands of years, and yet the sea has not increased. Let not the sceptical philosopher think that the recent discovery of the earth's rotundity has brought something to light

which is contrary to the teachings of the Bible. Turn to the 1st chapter of Ecclesiastes, and the 7th verse, where the Royal student says: "All the rivers run into the sea; yet the sea is not full." This is in harmony with modern science. How is this? Why does not the sea get full, when all the rivers are constantly running into it? Because, by the wonderful and wise arrangements of Almighty God, it loses every day by evaporation just as much as it receives from the rivers. How evident is the power of God in the creation of the waters and His wisdom in controlling them! What earthly king could do this? History tells us that King Canute, in order to rebuke his flatterers, when at Southampton, caused a chair to be placed on the seashore when the tide was out, so that he might command it as it rolled in. The king seated himself in this chair, commanded the sea not to approach nearer, but the tide, which was under the command of the King of kings, paid no heed to the word of the earthly king. Then the king said to his flattering courtiers: "See how regardless of my powers are these waves. No one should be called Sovereign but the Great Being whom the waters and the winds obey." Let Mr. Bradlaugh, M.P., the king of British Infidels, learn a lesson from King Canute.

3. Take, for another example, the composition and character of the atmosphere. For a long series of

ages the air was supposed to be one simple element, but in 1774 the learned Dr. Priestly proved it to be a compound body, consisting of nitrogen, oxygen, and carbonic acid gas. Two of these gases are fatal to animal life, viz., nitrogen and carbonic acid; and only one of the three gases will support life, viz., oxygen. But science shows that though the oxygen is but one-fifth of the air, yet the All-wise Creator has nicely adjusted the proportions of these gases, to support life and meet the requirement of men, and beasts, and plants. The respiration of all animals and men depends upon the atmosphere; and were there no air all creatures would immediately die. Consider the pressure of the air, which presses upon every substance with a weight equal to fifteen pounds to every square inch, so that the downward pressure of air upon every full-grown man is equal to fifteen tons. Some will ask how man can bear such a tremendous burden, and live and move and have his being? Because of the elasticity of the human body, and the equal pressure of the air in all directions. Were it not for this pressure, combined with the force of gravity, men and beasts would fall off into space in utter confusion. What wonderful wisdom is unfolded in this operation! The atmosphere is absolutely invisible, by which we are enabled to see the works of God in Nature and Providence. It was necessary that the air should be invisible, in order that other things might be visible

Suppose the air endowed with the same properties that render wood or stone, or even smoke and steam, visible, what would be the result? The air comes close to our eyes, and stretches away some fifty miles in every direction. If it had the qualities that render smoke, or steam, or wood, or iron visible, we should be walled round with walls of darkness fifty miles in thickness, and life would be a curse rather than a blessing. Think again of the fact that it is to the air we owe the action and influence of fire; as without it no fire could burn. Again, the air is the medium in which the process of evaporation is carried on, and in which clouds, rain, and dews are produced. The air is also the medium of sounds, and to it we are indebted for all the pleasures of the human voice, the harmonies of music, and the cheerful notes of birds. Were there no atmosphere, there would be no sounds, but all nature would be as mute as the silent tomb. The air is the vehicle of odours, and thereby the medium whereby we enjoy the perfume of flowers and sweet essences of nature. It is to the air we are indebted for the twilight and dawn which prepare our eyes for the splendour of a rising sun. The law of the refraction and reflection of light in the mass of air around us is a proof of the goodness of the great Lawgiver. Were it not for this sublime law the sun would burst upon us in a moment with a sudden *bright*ness, and shine with unvaried aspect till it as

suddenly disappeared in the evening. What would become of our eye-sight? It is the air which gives us all the beautiful tints of the sky, the brilliant colours of the rainbow, and the subdued azure of the firmament. In these terrestial adaptations and cosmological arrangements we cannot, if in a sound mind, fail to perceive the marks of Divine intelligence, goodness, and skill.

4. The length of the year on our planet is an evidence of Divine wisdom and goodness. Time is measured and divided according to the revolutions of the heavenly bodies, and especially by those of the sun and moon. The solar year comprises twelve solar months—that is to say, the time which the sun takes up in going through the twelve signs of the zodiac; and this time is generally computed to be three hundred and sixty-five days, five hours and some minutes. The sun is the great clock of the world, and all the watches, sun-dials, and clocks are regulated by it. Most people like to keep their clocks and watches by Greenwich time, and Greenwich time is kept by the sun, and the sun is regulated by God, and, therefore, we are indebted to the All-wise God for the time of day, and not to Sir George Airy, the Astronomer Royal, at Greenwich. The length of the year is exactly adjusted to the constitution of the vegetable world; insomuch that the plants may be called God's clock-

work, set to go for twelve months. Had the earth been placed in any other orbit than the one where it is now situated, the whole vegetable economy of our world would have been deranged. If the earth had been placed in the orbit of Venus the year would have been too short, if in the orbit of Saturn far too long for vegetable life in our world. All trees require just a year for their cycle. Take, for example, an apple or pear tree. It buds in spring, flowers in summer, bears ripe fruit in autumn, and rests in winter; and none of these seasons could be lengthened or shortened without great injury to animal and vegetable life. When we consider that all vegetables have certain epochs for budding, flowering, seeding, and resting, and that the length of the year is exactly adapted to them, we must conclude that it the work of a wise and benevolent God. The same may be said of almost all animals except man, the king of the animal world. The birds, for instance, take just a year for pairing, nesting, hatching, fledging, and flighting. Many insects take just a year for their transformations, and many animals take just a year for the cycle of their animal functions. It is very difficult to understand how any intelligent being can reflect upon this precise adjustment of the year to the cycle of plants, insects, and animals, without seeing the hand of God in it.

5. The length of day may also be considered a

proof of infinite wisdom and Divine goodness. The day is that portion of time which the earth takes up in revolving round its own axis. The day and night, taken together, make the natural or solar day, during which time the earth revolves on its axis in twenty-four hours. There is no reason, except the sovereign will of the Most High, why the diurnal revolution of the earth should be performed in twenty-four hours. Why, then, is our day just twenty-four hours long, and not twelve or forty-eight hours? I reply, because the animals and plants which live on our earth need such a day as God has given, and no other would suit so well. In plants there is a diurnal periodicity which corresponds with the length of the day; some of them open and close at a regular fixed hour, as a man rises and goes to bed. Animals also have a diurnal period, in their habits and functions. Man requires sleep once in twenty-four hours, and cannot enjoy health without it. If the day were only ten hours long, night would come on before tiredness; if it were forty-eight hours long, sleep would overtake man before the close of the day. This diurnal regulation is as much a matter of design as the winding up of a watch to go exactly twenty-four hours. Here is a plain proof of design, skill, and wisdom seen in the length of the day, If space would allow, it were an easy task to show the many evidences of design and contrivance, in the variety of climates, in the variety of organisa-

tions, in the laws of heat, the laws of electricity and magnetism, in the laws of light and sound; but I must conclude this letter. I will now supply the reader with the text for the above remarks, which he may find in the 107th Psalm, 43rd verse: "Whoso is wise, and will observe these things, even they shall understand the loving kindness of the Lord."

## LETTER XXV.

# The Sublime Science of Astronomy.

A MOST powerful argument for the existence of God is supplied by the evidences of design and contrivance, as presented in the ancient and sublime science of astronomy. Dr. Paley published his "Natural Theology" in 1802; and the first sentence in the 22nd chapter reads thus:—"My opinion of astronomy has always been that it is not the best medium through which to prove the agency of an intelligent Creator; but that, this being proved, it shows, beyond all other sciences, the magnificence of His operations. The mind which is once convinced, it raises to sublimer views of the Deity than any other subject affords; but it is not so well adapted as some other subjects are to the purpose of argument." The wonderful progress of the physical sciences, and especially that of astronomy, since the day of Dr. Paley, shows that he was wrong in the opinion expressed above. Nature is one great system of means and ends; and the accomplishment of the ends prove the perfect adaptation of the means. This wonderful contrivance is now seen in astronomy far

beyond the conceptions of Dr. Paley or any other scholar who lived in his day. Paley is quite right in saying "that astronomy shows beyond all other sciences, the magnificence of His operations;" but he is wrong, I think, when he says that it does not serve the purpose of the design argument. The science of astronomy makes us acquainted with the magnitudes and distances of the heavenly bodies, their various motions, their arrangements, and the laws by which their mighty movements are regulated. In the study of this grand science, I can see striking displays of design, contrivance, wisdom, power, and great goodness. I shall not attempt to explore the starry firmanent in one letter, as that would be as foolish as it would be to try to empty the sea with a teacup in one day. I shall notice a few points in the structure of the solar system, which clearly prove the wisdom and power of the Almighty Creator.

1. The sun is in the centre of the solar system, and is the source of light and heat to all the primary planets and their moons. The sun is like a great king in the midst of his starry subjects, giving out light and heat, and creating joy and gladness to all, from Mercury to Neptune. By the centripetal and centrifugal forces the primary and secondary planets revolve around the sun with perfect and sublime regularity. No one wishing to be accredited with common *sense* will assert that the sun fell into his central posi-

tion by what is called chance. What a grand proof of design and wisdom in the creation and position of the sun! Dr. Whewell, in his "Bridgewater Treatise," says "the position of the sun is an indication of design." Why was the sun put in the centre of this mighty system? No other reason in the wide universe but the sovereign will of God can be given.

2. Mercury is the nearest planet to the sun that has yet been discovered. Some modern astronomers are of opinion that there is a new planet, interior to Mercury, and the name which is proposed for this new member of the solar system is Vulcan. But I shall content myself by writing of the known planets, and leave the unknown for future study, when their existence is fully established. This planet is about thirty-six or thirty-seven millions of miles distant from the sun, and revolves around him in eighty-eight days. This planet is so near the sun that it is seldom seen by the naked eye. No chance could have made such a world as this, and, therefore, in this planet I can see a shining proof of the power and wisdom of God.

3. Venus is the next planet, which revolves around the sun in 224 days, at the distance of about sixty-eight millions of miles. This planet is the most brilliant orb which appears in the heavens, and is known as the morning and evening star. Venus has very nearly the same dimensions as the earth, but receives twice as much light and heat from the sun as the

earth; hence its greater brilliancy. When this star is viewed in the daytime, by means of an equatorial telescope, it appears as a crescent, and presents a brilliant proof of God's power, wisdom, and goodness.

4. Terra, or earth, is the next planet in order. It moves around the sun in 365 days, 5 hours, and some minutes, at the distance of nearly ninety-five millions of miles. The wisdom of God as seen in the formation of the earth has been pointed out in former letters, and I shall only name a few facts here, not named before. The annual revolution of the earth gives us the seasons—spring, summer, autumn, and winter; and the diurnal rotation gives us day and night. What design! What wonderful contrivance! Oh, what wisdom is here manifested! The earth, in its annual journey around the sun, goes rather sideways. This was thought by some great men of days gone by, to be the result of God's anger against sin—it seemed so unnatural. It is now seen that this oblique or sideling motion is a special arrangement of infinite wisdom and goodness, and that the world without it would have been a dreary desolation. The earth is a planet or globe, whose diameter is about 8000 miles, and its circumference about 24,000 miles, according to the well-known mathematical fact that the diameter of a circle is always one-third of the circumference. Who made

this fine globe? Let the greatest of English astronomers answer that question. Sir Isaac Newton, a very wise and godly man, was once examining a new and fine globe, when a gentleman came into his study who did not believe in a God, but declared that the world we live in came by chance. He was much pleased with the handsome globe, and asked: "Who made it?" "Nobody," answered Sir Isaac; "it happened here." The gentleman looked up in amazement at the answer; but he soon understood what it meant. The moon is a secondary planet, and is the constant attendant of the earth. Next to the sun himself, the moon is to us the most interesting of all the celestial planets in the solar system. The moon is a large solid ball of dense matter, receiving and reflecting the light of the sun, and was evidently designed by God to be the deputy of the sun during the night for the good of man. She is the nearest of all the heavenly bodies to us; being only about 240,000 miles from the earth. And she accompanies the earth in its extended journey round the sun. Did the moon fall into its elliptical orbit by chance? The infidel answers "I don't know." Then let him not parade his ignorance before the intelligent public of Great Britain, and declare his infidelity superior to Christianity.

5. The planet Mars comes next in order to the earth, and revolves around the sun in one year and

ten months. This primary planet performs his revolutions at the distance of 145 millions of miles from the sun. The breadth of the sphere of Mars is very little more than half that of the earth's; hence he has no moon. The four inner planets of the solar system are Mercury, Venus, Earth, and Mars, but the earth is largest of them and has one moon, the other three being destitute of satellites. The orbit in which Mars moves deviates so much from the form of a circle that the planet is sometimes twenty-seven millions of miles nearer to the sun than at others; consequently he is at different times all that distance farther from the earth. What wisdom it requires in the Ruler of the universe to keep all these rolling worlds in their proper paths and right orbits, so as to prevent their dashing each other to atoms! No wonder that Sir Isaac Newton said "that an infidel astronomer was mad."

6. During the present century a multitude of smaller planets have been discovered between the orbits of Mars and Jupiter. They are named Ceres, Pallas, Juno, Vesta, &c., &c. These smaller planets are known as asteroids, or, more correctly, planetoids. Dr. Olbers, after he had discovered the planet Pallas, started the theory that these planetoids were fragments from the disruption of some large planet which formerly revolved between Mars and Jupiter. Sir David *Brewster* attributes the fall of meteoric stones to the

smaller fragments of these bodies happening to come within the sphere of the earth's attraction. If such an awful catastrophe did take place, its cause, either physical or moral, speaks the warning voice to us to be ready to meet God. Such an event would not be inconsistent with what we know of the dispensations of the Almighty God which have taken place already. In the days of Noah "the fountains of the great deep were broken up, and the cataracts of heaven opened." If Dr. Olbers' supposition be the correct one, then we learn the fact that the earth is not the only globe in the universe which is subject to physical changes and moral revolutions. Therefore, the solar system not only proclaims the power and wisdom of God, but also a warning voice to the inhabitants of this planet against the day of its judgment.

7. The planet Jupiter is the next in order, and revolves in its orbit at the distance of 490 millions of miles from the sun. It performs its annual journey around the sun in nearly twelve of our years, moving at the rate of 29,000 miles an hour. This planet is the largest in the solar system, being 89,000 miles in diameter, or 1400 times larger than the earth. The telescope shows the disc of Jupiter to be crossed transversely by belts of comparative shade, and to be attended by four moons, arranged in a straight line in the same direction with the belts. These moons move around

Jupiter as our moon moves around the earth, and perform the same kindly office to the inhabitants of that primary planet as the moon to us. Why should this planet Jupiter have four moons and the earth only one? Because he is so much larger and farther from the sun. Did these four moons fall in two on either side of this primary planet by chance? A madman might say so, but any person of common sense, with common intelligence, can see marvellous design in the wonderful arrangements of Jupiter and his four satellites.

8. The planet Saturn is the next in the solar system to receive our consideration. This sublime world revolves around the sun at the mean distance of 900 millions of miles from the grand centre. The most wonderful thing connected with this planet is the double ring, which surrounds its body, but nowhere touches it, being 30,000 miles distant from any part of the planet, and yet is carried along with the planet in its journey around the sun. When we view Saturn and his rings through a telescope, we see that the rings cast a shadow on the planet, which proves that they are not shining fluids, but solid matter, just suited and beautifully contrived to reflect the light of the sun to the inhabitants of Saturn. A few weeks ago I was staying with Mr. John Clarke, of Haddenham, an eminent amateur astronomer, when by the *aid of his* telescope I saw this brilliant planet with his

splendid rings. This primary planet, being nearly twice as far from the sun as Jupiter, has twice as many moons. Therefore, Saturn has eight satellites to attend him round the sun. What a wise Creator is our God, and how good to all His creatures!

9. The planet which is known as Georgium Sidus and Uranus was discovered by Sir W. Herschel on March 13th, 1781. If common sense were allowed to rule scientific men, this planet would bear the name of Herschel and no other. This planet revolves around the sun at the distance of 1800 millions of miles from the centre, which is nineteen times farther than the earth is from the sun. What do the people of this world do for light during the night? The All-wise God has made six attendant moons to reflect the light of the sun during their night. Some reader of this letter might ask why Saturn should have eight moons and Herschel only six, when the latter is much farther from the sun than Saturn. The answer to that question shows the design and wisdom of God. As the diameter of Saturn is more than twice that of Herschel, the former world, being so much larger than Herschel, though not so far from the sun, required more moons, and God has made them. What contrivance!

10. The planet Neptune is the most distant primary yet discovered, being 2,850,000,000 miles from the sun. Its diameter is 50,000 miles, and, therefore, it

is 250 times larger than the earth. Its journey round the sun is performed in 166 years, and it is attended by one moon. It is highly probable that he has many moons to accompany him around the great centre, but being so far away, no human eye has yet seen them. In addition to the primary and secondary planets named, there is a class of celestial bodies called comets, which, if not guided by Infinite Wisdom, would strike the earth or the other worlds and cause death and awful destruction. I shall not speak of the fixed stars, as they are far beyond the planetary system in the immense region of creation.

When I bend the mind to this sublime subject, and study the architecture and mechanism of the universe, all declare the glory and make manifest the eternal power and wisdom of the Deity. God has tied together the different parts of this mighty machine, by the invisible cords of attraction; and planets, comets, and moons are all fastened to the sun by them. What a number of marks and evidences of design and contrivance all may see in the planetary system if they would only do as the old Hebrew prophet commanded, "Lift up your eyes on high, and behold! Who hath created these things?" The text will be found for this letter in Psalm xix. 1—6: "The heavens declare the glory of God; and the firmament showeth His handywork," &c., &c. King David has in these six verses recognised the

lesign argument, and invested it with all the eloquence of his inspired poetry.

I will close this letter with the beautiful words of Addison's paraphrase on this part of the 19th Psalm:

"The spacious firmament on high,
With all the blue ethereal sky,
And spangled heavens, a shining frame,
Their great Original proclaim.
Th' unwearied sun from day to day
Doth his Creator's power display,
And publishes to every land
The work of an Almighty hand.

"Soon as the evening shades prevail,
The moon takes up the wondrous tale,
And nightly to the listening earth
Repeats the story of her birth;
Whilst all the stars that round her burn,
And all the planets in their turn,
Confirm the tidings as they roll,
And spread the truth from pole to pole.

"What though in solemn silence all
Move round this dark terrestrial ball?
What though no real voice or sound
Amidst the radiant orbs be found?
In reason's ear they all rejoice,
And utter forth a glorious voice;
For ever singing, as they shine,
'The hand that made us is Divine.'"

## LETTER XXVI.

# Scientific Witnesses.

THE statement is frequently made that philosophy is opposed to Christianity, and that science contradicts the idea of a God. Such writers and speakers can have no regard for their mental or scientific reputation, as their statement is disproved by true science, Christianity, and common sense. I cannot put the whole circle of the sciences into one letter but, with your permission, I will call a few into the witness box and hear their evidence and testimony as to the atheistic statement "No God."

1. The science of anatomy is the systematic arrangement of all that is known of the bony structure and organization of animal bodies. Human anatomy informs us that man's body contains 245 bones, and is a wonderful piece of mechanism, full of contrivance and design. Mr. Bradlaugh's body will contain 245 witnesses against his Atheism, as not a single bone in his body is an infidel, for the heart is the seat of infidelity. Which of the bones in the science of anatomy contradicts the existence of God? Not one. Sir Charles

Bell could read "God with us" written on every bone in man's physical frame.

2. The science of astronomy is a systematic statement of all that is known of the heavenly bodies. This science makes us acquainted with the laws, revolutions, distances, magnitudes, and arrangements of the suns, moons, stars, comets, and starry worlds which roll and shine in space. I ask the scientists, agnostics, positivists, and atheists, is there one sentence of Atheism written on the heavens above? Not one. Do the nightly wonders of the skies, whether seen by the common eye or revealed through the tube of Lord Rosse's telescope to the scientific gaze of Sir George Airey, contradict the existence of a Creator? Never—no, never! Every astronomer of any reputation points out the order and harmony which prevails universally in the stupendous architecture of the heavens; the whole proving the existence, power, and wisdom of the Almighty God.

3. The science of botany is the systematic classification of all that is known of that part of natural history which relates to the vegetable kingdom. This science makes us acquainted with plants, trees, roots, stalks, leaves, blossoms, flowers, and fruits. There are more than 56,000 different trees, plants, and flowers in the vegetable kingdom, and not one of them an infidel. Where can I find a sceptical tree or an atheistic flower? Nowhere. Every flower in

the garden, every blade of grass in the field, and every leaf in the forest bear testimony to their Creator.

4. The science of chemistry is a systematic classification of all that is known with regard to the substances of which the globe and its animal and vegetable products are composed. Do the wonderful laws of chemistry, which regulate the attraction and repulsion of atoms, the affinities, combinations, and separation of molecules, in fixed ratios and definite proportions, contradict the existence of an intelligent Creator. Do any of the conditions of matter repudiate the agency of a God? The only and true answer is—Every atom, as well as mighty worlds, proclaim the being of God.

5. The science of geology is the systematic arrangement of all that is known with regard to the crust of the earth and the natural history of our globe. This science directs our views to a stupendous series of events stretching back to the ages of the past. Do the rocks of the departed ages bear one inscription which denies the being of a God? No. The testimony of the rocks in every gradation of our planet's geological history is in favour of an All-wise Creator. Mr. Hugh Miller, the eminent Scotch geologist, has clearly shown the above idea in his two works entitled "Footprints of the Creator" and the "Testimony of *the Rocks.*" Let the Christian hold fast to the truth

as it is in Jesus, and be assured that the hammer of the sceptical geologist will never break the "Rock of Ages."

6. The science of music is the systematic arrangement and record of all that is known of notation, melody, harmony, and rhythm. The study of this charming science makes us acquainted with every character and gradation of sound. Is there an infidel note in the whole compass of this science, from the deepest bass to the highest soprano? No. I have studied this science from childhood, and have never yet discovered a note or tone that did not sound to the praise of its Creator, when rightly used.

7. If I were to extend my remarks to the whole circle of the sciences, every one of them would speak out with a distinct voice, and proclaim the being power, wisdom, and goodness of an Almighty God. The whole of the sciences are only so many systematic arrangements and collections of great truths existing in nature, and existing there because previously existing in the Infinite Mind and created by God. All the human arts are only so many imperfect imitations of nature's operations.

8. Christianity has a philosophy as sound and reasonable as any other science. Faith has a genuine philosophy. It accepts Christ and the facts of His life on the same ground upon which Sir Isaac Newton accepted the law of gravity. It cannot resist the

evidence. A believer is but a spiritual philosopher, reasoning about facts as real as any in the physical world. The disciples of Huxley and Tyndall accept the facts of the physical universe as expounded by those skilful and acute scientists. The disciples of Christ do exactly the same thing in accepting the facts of Christianity. Both classes of disciples require faith in the laws and works of God; both reason and philosophize on the works and words of God. The students of natural science should remember that the object of the Bible is to show forth the character of God and the plan of salvation, and is not a handbook of physical science. The Bible is seldom in harmony with the floating theories of the hour, but always in harmony with every scientific truth when fully established. If the Bible had been in harmony with the scientific theories in the last century, it would be out now, and if in harmony with the theories of this century, it would be out in the next. Thus we see the wisdom of God in making the Bible the textbook of the science of salvation, and not a handbook of natural science. A scientific truth is as much a truth of God as any truth in the Bible, and they cannot contradict each other. The interpreters of the Bible and of science may differ, but the things they profess to explain perfectly agree. The Bible reveals the existence of God, and not one of the sciences contradicts it; and the man who says "There

is no God" is a fool according to the Scriptures and common sense. There are some who call themselves sceptics and philosophers, to whom I quote the words of Lord Bacon, the Father of Practical Philosophy: "Though a smattering of philosophy might lead a man into Atheism, a deep draught of it will assuredly bring him back to the belief in a God and in a Divine Providence."

The text for this letter will be found in Romans i. 20: "For the invisible things of Him from the creation of the world are clearly seen, being understood by the things that are made, even His eternal power and Godhead; so that they are without excuse."

## LETTER XXVII.

# The Follies and Absurdities of Atheism.

THE subject of this last letter is Atheism, with its follies, absurdities, and contradictions. An Atheist, according to the etymology of the word, is one who denies the existence of God. This is called speculative Atheism; but professing to believe in God, and yet acting contrary to this belief, is called practical Atheism. Practical Atheism is possible, but speculative Atheism, with its implied anti-Theism, is absolutely impossible. It is evident that Atheism is a disease of the heart more than of the understanding, for no man has the mental capability to prove the non-existence of God, but he has the heart to live without God in the world. I shall quote my text at the commencement of this letter to show that moral Atheism is very old. See Psalm xiv. 1:—"The fool hath said in his heart, there is no God." On this text I will quote the pointed words of Mr. C. H. Spurgeon, which will have more weight with the general reader than the comments of any other man in England:—"The Atheist is the fool pre-eminently, and a fool univer-

sally. He would not deny God if he were not a fool by nature, and having denied God, it is no marvel that he becomes a fool in practice. Sin is always folly, and as it is the height of sin to attack the very existence of the Most High, so is it also the greatest imaginable folly. To say there is no God is to belie the plainest evidence, which is obstinacy; to oppose the common consent of mankind, which is stupidity; to stifle consciousness, which is madness. If the sinner could by his Atheism destroy the God whom he hates, there were some sense, although much wickedness, in his infidelity; but as denying the existence of fire does not prevent its burning a man who is in it, so doubting the existence of God will not stop the Judge of all the earth from destroying the rebel who breaks His laws; nay, this Atheism is a crime which much provokes Heaven, and will bring down terrible vengeance on the fool who indulges it." Some people may think the words of the famous preacher rather too hard, as Mr. George J. Holyoake thinks that King David himself is too hard upon the sceptics of his day. But let the readers who think these words too hard go and live in London, Birmingham, Leeds, Newcastle, and Northampton, where Atheists are numerous, and they will soon learn that neither King David nor the king of preachers is too hard upon infidels. Sir Isaac Newton declared that "an infidel astronomer was

mad." Dr. John Hunter, the celebrated anatomist, said that "a sceptical anatomist must be a madman." Mr. W. Gillespie, a most profound reasoner and metaphysician, has described an Atheist as "a non-descript monster, created by nature in a moment of madness." I shall be able to justify all these remarks before I have done this letter.

1. Mr. C. Bradlaugh, M.P., has written "A Plea for Atheism," which lies before me on the table, and which I have carefully studied in order to find out, if possible, what there is in Atheism worth pleading for. Every system or science which is presented for public acceptance should have some rules, practical principles, and positive teaching, but I look in vain for any of these in Mr. Bradlaugh's brief essay. It is, from beginning to end, a plea for nothing, and a series of denunciations against the Christian's God and the orthodox faith. Atheism is a system of negations, because every item of positive teaching belonging to secularism belongs to Christianity as such; and, therefore, Atheism is negation, or nothing. Atheism, like Agnosticism, says "I don't know," and therefore both Atheists and Agnostics are willingly and wilfully ignorant of the Christian's God.

2. A belief in the existence of an intelligent first cause is an intellectual necessity. This fact is acknowledged by the greatest thinkers of the age. To wit, Mr. Herbert Spencer admits "a great first cause,

which has existed from eternity." Mr. Matthew Arnold, the apostle of culture, says "There is in the universe an eternal power, not ourselves, which makes for righteousness." What is this Eternal Power but the Almighty God recognised by the Christian? Mr. F. Harrison, the moderm prophet of Positivism, fully admits the existence of a first cause. That great scientist, Professor Tyndall, says "We are woven by something not ourselves." What is this but an admission of a Creator? Sir W. Hamilton says "Creation is the evolution of existence, from possibility and actuality, by the fiat of the Deity." The late John Stuart Mill was claimed by sceptics, but most unjustly, as he believed in the existence of God, and challenged the world to prove him an Atheist, if it could, from his books. A belief in the existence of God is absolutely necessary in order to account for the world and man. This thought is fully expressed by that great orator, Robert Hall, thus: "Our belief in the being of a God is the belief of a very profound mystery. The very idea of such a being would appear incredible, were it not necessary; because the greatest absurdities would flow from supposing the contrary. Nothing can be accounted for unless we admit the existence of a causeless cause—a presiding Governor of the Universe. We are compelled, therefore, to admit the less difficult of the two; or, rather, to choose difficulty instead of impossi-

bility; mystery instead of absurdity; and hence we repose on this grand truth. This is the great mystery of the universe, which is at once the most certain and most incomprehensible of all things; a truth at once enveloped in a flood of light and an abyss of darkness. Inexplicable itself, it explains all besides; it casts a clearness on every question, accounts for every phenomenon, solves every problem, illuminates every depth, and renders the whole mystery of existence as perfectly simple as it is otherwise perfectly unintelligible, whilst itself remains alone in impenetrable obscurity. After displacing every other difficulty, it remains the greatest difficulty of all, in solitary, unsurmountable, and unapproachable grandeur." I shall not add any of my remarks to those of Robert Hall, as it would be like holding a candle to the sun.

3. Let us now suppose that Atheism is right, and that Mr. Bradlaugh's view of things is better than that of Mr. Hall's. How are we to account for the creation of the world and all things? The world is either the result of chance, or necessity, or design. Did chance ever make a watch, or build a house, or construct a steam engine, or invent a telephone? Will chance fit means to an end, and that in a thousand instances, and not fail in one case? How often might a man, after he had shaken up a lot of letters in a bag, fling them out upon the ground before they would fall into an exact poem like "Paradise Lost," or into a book

like Lord Beaconsfield's last novel? And may not a little book be as easily made by chance as the great volumes of the world? How long might a man be sprinkling colours upon canvas with a careless hand before he would happen to make the exact picture of a man? And is a man more easily made by chance than his picture? The world could not be made by chance, as chance has never yet made a watch, a house, an engine, a book, a poem, a picture, or a man. It is certain that the world was not made by necessity, as it is not a cause but an effect; not a power, but the want of it. Still some infidels pretend to believe that all the flowers were coloured without a painter, that men and women came into the world without a Creator, and that the mighty temple of the universe was built without an architect. This is enough to show the follies and absurdities of Atheism.

4. Let us, in the fourth place, point out the awful arrogance and daring presumption of the Atheist who makes the assertion, "There is no God." The wonder turns on the great process by which the Atheist could grow to the immense intelligence that can know there is no God. This intelligence involves the very attributes of Deity, while a God is denied. I cannot forbear quoting in this place from the great Northern light, Dr. Chalmers, whose words clearly show the ineffable folly and absurdity of Atheism. Here are

the words of the great Scotch divine :—" To say there is a God we have only to see the impress of His Being and attributes; but to be able to say 'with the fool' there is no God, we must have roamed over all nature, and seen that no mark of a Divine footstep was there, and we must have gotten intimacy with every existent spirit in the universe, and learned from each that never did a revelation of the Deity visit him; and we must have searched into the records, not of one solitary planet only, but into the archives of all worlds, and thence gathered that throughout the wide realms of immensity not one exhibition of a living and reigning God has ever been made. To pronounce there is 'no God' we must break forth beyond all those limits that have been prescribed to man's excursive spirit by the sound philosophy of experience, and, by a presumption the most tremendous, even the usurpation of all space and time, affirm 'no God.' To make this out we should need to travel abroad over the surrounding universe till we had exhausted it, and to search backward through all the hidden recesses of eternity, to traverse in every direction the plains of infinitude and search the outskirts of that space which is itself interminable; and then bring back to this little world of ours the report of an universal blank, wherein we had not met with one manifestation or one movement of a presiding God. For man not to

know of a God, he has only to sink beneath the level of our common nature; but, to deny Him, he must be a God himself. He must arrogate the ubiquity and omniscience of the Godhead."

Enough has been said in this letter, and preceding ones, to show the follies, absurdities, and presumptions of Atheism.

# ADDENDUM.

DEAR READER,—Since these letters were put into the hands of the printer, I have read two pamphlets written by Henry Varley, of London, which clearly show that Mr. Bradlaugh is utterly unfit to represent any English constituency. After a careful study of these pamphlets, I have no hesitation in saying that they have my unqualified approval. Like Mr. Varley, I am a Liberal in politics, and believe that no man should be molested or disqualified on account of his religious convictions. But Mr. Bradlaugh is an avowed Atheist, and has no religious convictions, and, therefore, is not opposed on that account. His case is unique in character, and entirely outside of such cases as those of George Fox, John Bunyan, and some others.

Mr. Bradlaugh has himself to thank for his present difficulty and opposition. He might have claimed to make an affirmation without casting contempt upon the oath which most Englishmen regard as sacred and binding. He has defied and insulted public sentiment by doing so. Mr. Bright and the members of the Society of Friends object to take the oath from a tender conscience towards God, but this is not the case with Mr. Bradlaugh. He has created his own

troubles in and out of the House of Commons, and has no just right to complain. He first cast contempt on the oath by calling it "a meaningless form;" and then, to gain a seat in the House, he declared himself willing to take the oath.

What right has he now to complain when Lord Churchill, Sir Stafford Northcote, and others, take him at his word, and refuse to allow him to pretend to take an oath, when its appeal to the Divine Being has for him no meaning whatever? Let us not be deceived, this is not a question of politics, nor Church *versus* Dissent, but Atheism *versus* Christianity. There is a strong religious feeling pervading all classes of society, and all shades of political opinion respecting Mr. Bradlaugh. Lord Sandon, in his speech at Liverpool, fully expressed this strong feeling when he said: "Liberal and Conservative, Home Ruler and Tory, Nonconformist and Roman Catholic had been stirred to the very core, by the professed advocate of irreligion and Atheism striving to take his place in the House of Commons." I repeat that Mr. Bradlaugh has solely himself to blame for his present position, and not the Conservatives, Liberals, or Radicals.

The following summary of Mr. Bradlaugh's logic, which appeared recently in the *Scotsman*, is, I think, well worth repeating here:—

"(1) Because persons of all kinds of religious belief are admitted to Parliament, therefore I, who

scoff at all religion, and have no religious belief, should also be admitted. (2) Because persons who are unanimous in the belief in an Almighty God (though they differ in the manner of worshipping him) are admitted, therefore I, who deny the existence of any such God, should also be admitted. (3) Because some persons, on account of their great veneration for the Word of God, and desire to obey literally one of His commands, which they think forbids oaths, are allowed to make affirmation instead, therefore I, who repudiate that book as imposture, and scout the idea of God, should also be allowed to make affirmation."

These letters are the extra work of a country minister, who had, during their composition and compilation to preach three times every Sabbath and several times during the week, besides attending to other religious meetings; the author, therefore, has some little reason to expect the kind consideration and indulgence of the reader. They were much appreciated when they first appeared in the *Bucks Advertiser and Aylesbury News*, as the following letter from a scientific correspondent will show:—

"*To the Editor of the Bucks Advertiser and Aylesbury News.*

"SIR,—Will you permit me, as one of your numerous readers, to express the great satisfaction which

the perusal of the series of theological letters, by 'Christianus Sum,' has given me?

"Though I should deprecate the promiscuous introduction of theological subjects into a secular journal, yet I am bound to say the exceptional circumstances under which these letters appear, and the exceptional way in which the subjects of them are handled, not only justify, but call for notice in some such able journal as the one which you conduct. And, for one, I beg to thank you for lending your columns to the theological letters. And without committing myself to the acceptance of every sentence of the writer, I would point out, by your kind permission, what I consider give to these letters a rare value.

"In the first place, they appear at a most opportune moment, when the minds of men are especially drawn to the consideration of the claims of Christianity —when men are asking, 'Are its truths in harmony with the teachings of sound science?' I speak of sound science, because a great deal which has of late been hastily put forth as science has been hastily abandoned as utterly unreliable. It is, therefore, well that these questions should receive the fullest discussion.

"Again, the writer evinces a full acquaintance with his subject, covering the whole range of the argument.

"Again, he beards the lion in his own den; he enters the very citadel of science, and from there

brings forth the weapons which lay the enemy low. It is this scientific basis underlying these letters that gives to them unwonted power. Men have held up scientific truths, and brandished them as weapons with which to destroy the claims for the Divine origin of Christianity. 'Christianus Sum' has taken hold of scientific truths and used them as weapons to overthrow the foe. Thus the arsenal of the enemy has become the vantage ground of the Christian advocate. How plainly is this seen in the sixth, seventh, and eighth letters! Sir, I should, as a lover of my country, be glad to see these three letters sown broadcast among the thousands of our artizans in the dense populations of our manufacturing districts.

"For I am persuaded that the arguments are unanswered and unanswerable. The boasting of infidels are idle till they have answered them. The train of reasoning by which the writer shows that faith is as much a ruling power in everyday life as it is in the matter of religion—that science bears testimony to the fact that the great Creator performed miracles whenever the good of His creatures requires them—that to the great bulk of scientific men their sciences are purely matters of faith—that they have not verified them for themselves, but have accepted on the bare testimony of the very few who have verified them—and that, therefore, it is grossly inconsistent for the bulk of scientists

to object to receiving Bible truths on the testimony of others.

"I shall follow the trains of reasoning in the coming letters with great delight, and any of your readers may glean from these letters food for months of thought, and if they will study them carefully they will join with me in giving the most hearty thanks to 'Christianus Sum' for these masterly productions, and in wishing him God-speed in the noble work of pointing out to his fellow-citizens the great fact that the faith of the Christian rests upon foundations so deep and so strong, as no sophistries of man, no false wit, no human genius, no change, can ever destroy or even shake.

"I am, Sir, yours respectfully,

"PRO-SCIENCE."

That these letters may be the means of doing good is the earnest wish, dear readers, of

Yours to serve in the Gospel,

WILLIAM HILLIER.

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